

1A



Geisli

LAUSNIR

Þrautir

Bls. 1

Breytileg svör.

Bls. 2

1

a 666, 667, 668, 669, 670, 671, 672, 673, 674

b 666, 676, 686, 696, 706, 716, 726, 736, 746

c 666, 766, 866, 966, 1066, 1166, 1266, 1366, 1466

2

Á undan	Tölur	Á eftir
72	73	74
499	500	501
88	89	90
236	237	238

Á undan	Tölur	Á eftir
258	259	260
746	747	748
598	599	600
639	640	641

10 lægri	Tölur	10 hærrí
87	97	107
792	702	712
381	391	401
985	995	1005

100 lægri	Tölur	100 hærrí
97	197	297
1602	1702	1802
831	931	1031
1895	1995	2095

3

720									
	731					736		738	
		742				746		748	
750	751	752	753	754	755	756	757	758	759
	761			764				768	
	771				775			778	
	781					786		788	
	791						797	798	
	801							808	
	811							818	819
	821							828	

Bls. 3

- 4 **a** 2010
b 2110
c 90 ár

- d** 1910
e 1960

Svör miðast við árið 2010.

- 5 Talnarunan 0, 50, 100, 150 ... 2450

- 6 **a** 400 ár
b 1400 ár
c 400 ár

- 7 **a** 550 ár
b 450 ár
c 1450 ár

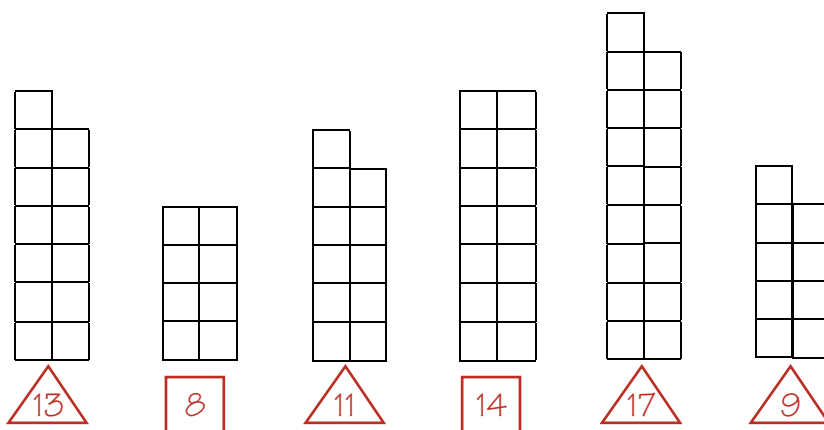
8 $600 + \underline{550} = 1150$
 $450 + \underline{850} = 1300$
 $250 + \underline{650} = 900$
 $150 + \underline{1600} = 1750$

9 $\underline{1250} + 200 = 1450$
 $\underline{800} + 1300 = 2100$
 $\underline{550} + 1700 = 2250$
 $\underline{350} + 1200 = 1550$

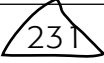

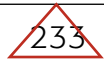

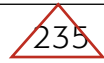

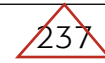





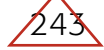







Bls. 4

- 10 Hægt er að raða 26 kubbum í tvöfalda röð en ekki 25.

11



12 a

 231	 232	 233	 234	 235	 236	 237	 238	 239	 240
 241	 242	 243	 244	 245	 246	 247	 248	 249	 250

b Í einingasætinu eru 2, 4, 6, 8 og 0.

c Í tugasætinu eru 1, 3, 5, 7 og 9.

13 Mörg svör til dæmis 117, 997, 267.

14 Mörg svör til dæmis 2934, 2936, 5998, 4998.

Bls. 5

15 $7 + 5 = 12$
 $9 + 13 = 22$
 Ég fæ slétta tölu.

16 $6 + 6 = 12$
 $2 + 14 = 16$
 $7 + 6 = 14$
 Ég fæ slétta tölu.

17 $3 + 6 = 9$
 $13 + 12 = 25$
 $9 + 4 = 13$
 Ég fæ oddatölu.

18 $6 + 7 = 13$
 $12 + 13 = 25$
 $4 + 9 = 13$
 Ég fæ oddatölu.

19 $4 + 4 + 4 = 12$
 $2 + 2 + 2 + 2 + 2 + 2 = 12$
 $4 + 4 + 2 + 2 = 12$

$6 + 6 = 12$
 $6 + 4 + 2 = 12$

20 $1 + 3 + 7$
 $5 + 3 + 3$
 $7 + 1 + 1 + 1 + 1$
 $5 + 3 + 1 + 1 + 1$
 $9 + 1 + 1$
 5 dæmi

21 $23 - 12$ $25 - 14$
 $43 - 32$ $165 - 154$
 $13 - 2$ $199 - 188$
 $47 - 36$ $77 - 66$
 $15 - 4$ $33 - 22$
 Óteljandi mörg

Bls. 6

- 22 **a** 
- b** 
- c** 
- d** Ég gat gert 27 þriggja stafa tölur.

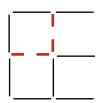
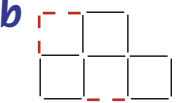
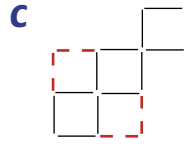

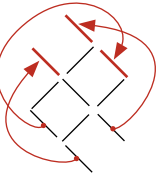
23 $5 + 2 = 7$

H	T	E
7	4	7

24

Tala 1	Tala 2
30	22 Summan 52
34	26 Summan 60
33	25 Summan 58

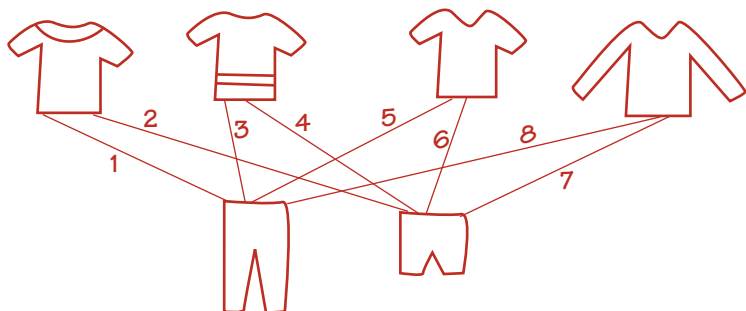
Bls. 7

- 26 **a**  **b**  **c** 
- 27 
- 28 

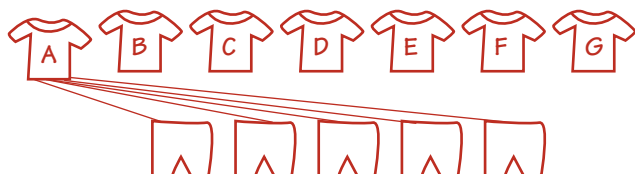
Bls. 8

- 29 Lesa þrautina og skilja vandann.
 Prófum hugmyndir að lausn.
 Útskýrum lausnina með myndum og orðum.

30



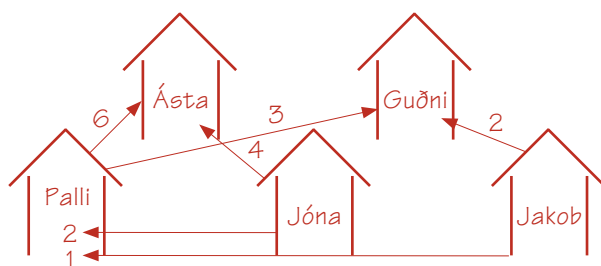
2 möguleikar á buxum
fyrir hvern bol
 $2 \cdot 4 = 8$
8 möguleikar



5 möguleikar á buxum fyrir
hvern bol
 $5 \cdot 7 = 35$
35 möguleikar

Bls. 9

31



Ræðið saman um þrautirnar um Loga og Ástu. *Margar leiðir.*

Mælingar

Bls. 10

1 a

sentímetrar
kílómetrar
desílítri Breytileg svör.
lítri
kíló

b

málband
reglustiku Breytileg svör.
baðvikt
lítrakönnu
desílítramál

Lengd

hvað getið þið mælt?	mælitæki	mælieining	ágiskun
lengd á París	málband	cm	250 cm
lengd á leikvelli	metraprik	m	8 m

Flötur

hvað getið þið mælt?	mælitæki	mælieining	ágiskun
körfuboltavöll	dagblöð	dagblað	40 dagblöð
hjólábretti	rúðunet	rúða	300 rúður

Bls. 11

Hitastig

hvað getið þið mælt?	mælitæki	mælieining	ágiskun
hita úti	hitamælir	gráður	7 gráður
hita í sandi	hitamælir	gráður	9 gráður

Tími

hvað getið þið mælt?	mælitæki	mælieining	ágiskun
100 m hlaup	skeiðklukka	sekúndur	40 sekúndur
frímínútur	úr	mínútur	20 mínútur

Þyngd

hvað getið þið mælt?	mælitæki	mælieining	ágiskun
bolta	vigt	gramm	500 grömm
snú-snú bönd	vigt	gramm	1500 grömm

Bls. 12

2

Þyngd með vog.

Breidd með málbandi.

Teikna utan um hann og sjá hve stóran flöt hann þekur.

Dæmi um lausnir

3

lengd rútu m

lengd skeiðar cm

þyngd bókar g

þyngd reiðhjóls kg

hitastig vatns gráður í C

lofthita °C

svefntíma klukkustundir

tímalengd frímínútna mínútur

þyngd ungbarns grömm

þyngd ferðatösku kg

vökvamagn í könnu dl

vegalengd frá Húsavík til Egilsstaða km

vatnsmagn í sundlaug l

tíma í 100 m hlaupi sek.

4 a Breytileg svör.

b Breytileg svör.

Bls. 13

5 100 cm

6

hlutur	m	cm
borð	1	100
gangur	4	400
gluggi	3	300
gangstétt	9	900

7 10 desímetrar

8 a

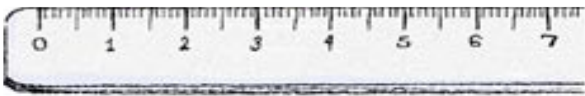
hlutur	dm	cm
gluggi		
hurð		
tafla		
hilla		
stólfótur		
blýantur		

9 Fylltu í töfluna.

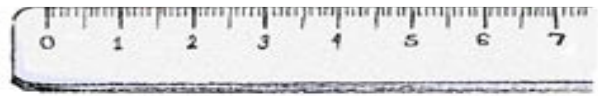
hlutur	m	dm	cm
gluggi	6	60	600
maður	2	20	200
bíll	4	40	400

Bls. 14

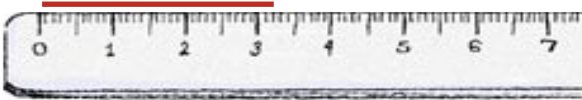
10 10 mm



23 mm



52 mm



32 mm



43 mm

11 Breytileg svör.

12 a Breytileg svör.

Bls. 15

13 Breytileg svör.

14

- | | | | | | |
|------|-------|------|------|-------|-----|
| 7 mm | 30 mm | 9 cm | 4 dm | 50 cm | 8 m |
|------|-------|------|------|-------|-----|

15 a

- | | | | | |
|-----------------------|-----------------------|---------------------|-----------------------|---------------------|
| ³
12 dm | ²
80 cm | ⁴
3 m | ¹
50 mm | ⁵
8 m |
|-----------------------|-----------------------|---------------------|-----------------------|---------------------|

b

- | | | | | |
|------------------------|----------------------|----------------------|------------------------|----------------------|
| ²
300 mm | ¹
3 cm | ⁴
30 m | ⁵
300 dm | ³
3 dm |
|------------------------|----------------------|----------------------|------------------------|----------------------|

c

- | | | | |
|----------------------|------------------------|-----------------------|------------------------|
| ²
6 dm | ⁴
500 cm | ¹
55 cm | ³
700 mm |
|----------------------|------------------------|-----------------------|------------------------|

Bls. 16

16 a Breytileg svör.

17 a 2–3 kg hveitipoki

b 30–50 kg krakki í skóla

c 1 kg mjólkurlítri

d um það bil 10 kg eins árs barn

e um það bil 5 kg skólataska

Bls. 17

18

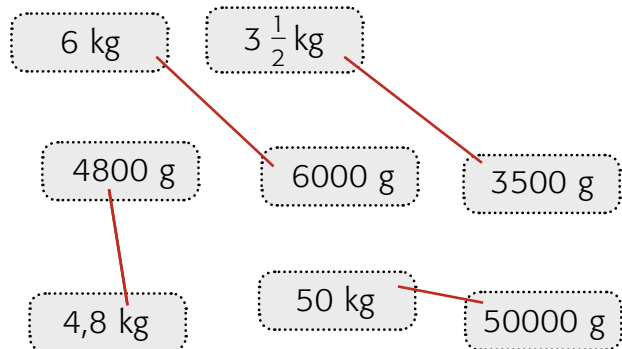
7 kg = 7000 g

4 kg = 4000 g

$\frac{1}{4}$ kg = 250 g

12 kg = 12000 g

19



20 a 4 sinnum.

Pórukökur	
Uppskrift –	<u>500</u> stk.
<u>1000</u> g smjörlíki	
<u>1700</u> g sykur	
<u>8</u> egg	
<u>1200</u> g hveiti	
<u>600</u> g haframjöl	
<u>2</u> tsk. matarsóti	
<u>8</u> tsk. lyftiduft	
<u>600</u> g rúsínur	
<u>800</u> g súkkulaði	
<u>12</u> msk. mjólk, bætt í ef þarf	

b 875 g

1750 g

Margföldun og deiling

Bls. 18

1 fjöldi raða 5
fjöldi í röð 4

fjöldi raða 4
fjöldi í röð 5

heildarfjöldi 5 · 4 = 20

heildarfjöldi 4 · 5 = 20

2 a 6 · 7 = 42

b 5 · 7 = 35

c 3 · 5 = 15

7 · 6 = 42

7 · 5 = 35

5 · 3 = 15

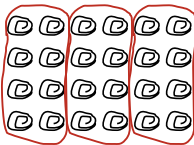
d 2 · 5 = 10

6 · 8 = 48

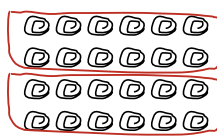
5 · 2 = 10

8 · 6 = 48

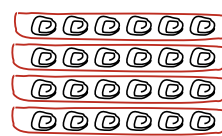
3 $3 \cdot 8 = 24$



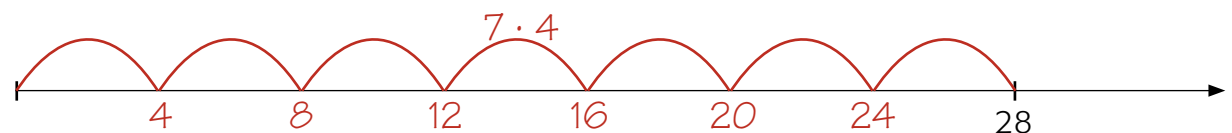
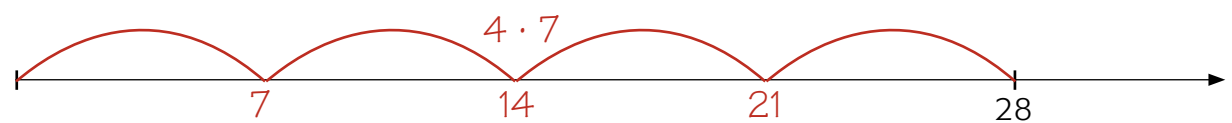
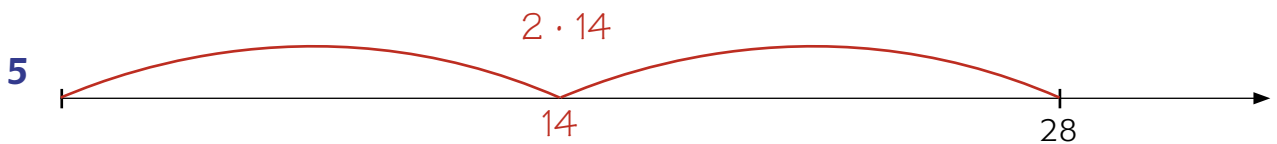
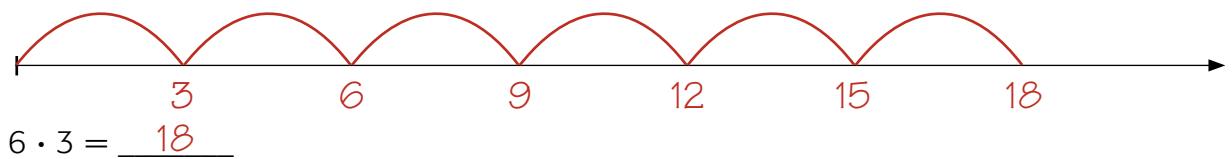
$2 \cdot 12 = 24$



$4 \cdot 6 = 24$



Bls. 1



6

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

7 a 12, 24, 36, 48, 60, 72, 84, 96

b Þær eru allar margfeldi af 12.

Bls. 20

8

•	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

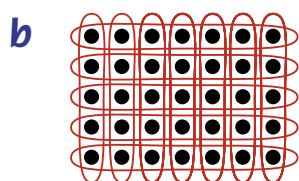
- 9** $2 \cdot 2 = 4$ $1 \cdot 3 = 3$
 $3 \cdot 3 = 9$ $2 \cdot 4 = 8$
 $4 \cdot 4 = 16$ $3 \cdot 5 = 15$
 $5 \cdot 5 = 25$ $4 \cdot 6 = 24$
 $6 \cdot 6 = 36$ $5 \cdot 7 = 35$
 $7 \cdot 7 = 49$ $6 \cdot 8 = 48$
 $8 \cdot 8 = 64$ $7 \cdot 9 = 63$
 $9 \cdot 9 = 81$ $8 \cdot 10 = 80$
 $10 \cdot 10 = 100$ $9 \cdot 11 = 99$
- 10** Hvort er meira $4 \cdot 4$ eða $3 \cdot 5$? $4 \cdot 4$
Hve miklu munar? 1
- 11** Hvort er meira $7 \cdot 7$ eða $6 \cdot 8$? $7 \cdot 7$
Hve miklu munar? 1
- 12** $12 \cdot 12 = 144$
Hvað er $11 \cdot 13$? 143

Bls. 21

13 Það eru sömu tölur beggja megin við strikið.

- 14** $3 \cdot 4 = 12$ $4 \cdot 3 = 12$ $9 \cdot 10 = 90$ $10 \cdot 9 = 90$
 $2 \cdot 7 = 14$ $7 \cdot 2 = 14$ $2 \cdot 6 = 12$ $6 \cdot 2 = 12$
 $5 \cdot 8 = 40$ $8 \cdot 5 = 40$ $9 \cdot 11 = 99$ $11 \cdot 9 = 99$
 $8 \cdot 2 = 16$ $2 \cdot 8 = 16$ $6 \cdot 12 = 72$ $12 \cdot 6 = 72$
 $7 \cdot 5 = 35$ $5 \cdot 7 = 35$ $2 \cdot 23 = 46$ $23 \cdot 2 = 46$
 $1 \cdot 8 = 8$ $8 \cdot 1 = 8$ $4 \cdot 15 = 60$ $15 \cdot 4 = 60$

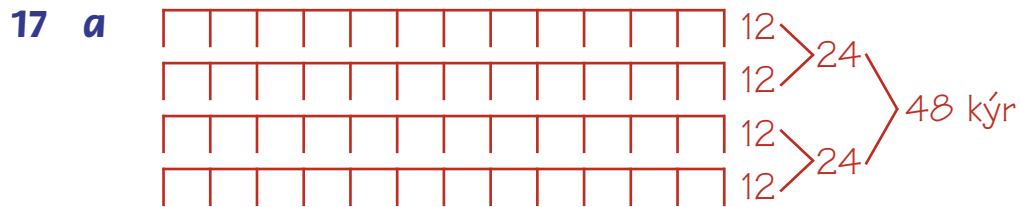
15 a 35 35



Það eru jafn margar kúlur með fimm röðum með sjö og með sjö röðum með fimm í. Það má víxla tölunum því fjöldinn er sá sami.

- 16 a 4462
 b 3003 77
 c 581882 467

Bls. 22



- b $6 \cdot ? = 48$
 $6 \cdot 8 = 48$ 8 básar

- 18 $\underline{1} \cdot \underline{48} = 48$ $\underline{3} \cdot \underline{16} = 48$ $\underline{6} \cdot \underline{8} = 48$ $\underline{12} \cdot \underline{4} = 48$ $\underline{24} \cdot \underline{2} = 48$
 $\underline{2} \cdot \underline{24} = 48$ $\underline{4} \cdot \underline{12} = 48$ $\underline{8} \cdot \underline{6} = 48$ $\underline{16} \cdot \underline{3} = 48$ $\underline{48} \cdot \underline{1} = 48$

- 19 a $2 \cdot 24$
 b Þá væri einfalt að setja kýrnar í fjósið.

- 20 a Faldheiti fyrir:

24	35	36	40
$1 \cdot 24$	$1 \cdot 35$	$1 \cdot 36$	$1 \cdot 40$
$2 \cdot 12$	$5 \cdot 7$	$2 \cdot 18$	$2 \cdot 20$
$3 \cdot 8$	$7 \cdot 5$	$3 \cdot 12$	$4 \cdot 10$
$4 \cdot 6$	$35 \cdot 1$	$4 \cdot 9$	$5 \cdot 8$
$6 \cdot 4$		$6 \cdot 6$	$8 \cdot 5$
$8 \cdot 3$		$9 \cdot 4$	$10 \cdot 4$
$2 \cdot 12$		$12 \cdot 3$	$20 \cdot 2$
$1 \cdot 24$		$18 \cdot 2$	$40 \cdot 1$
		$36 \cdot 2$	

- b 36, 48 og 27 eru dæmi um tölur sem hafa mörg faldheiti.
 c Tölurnar 7, 13 og 31 eru dæmi um tölur sem hafa fá faldheiti.

Bls. 23

21 $5 \cdot 6 = 30$ Það komast 30 frímerki á hverja síðu.

22 Það komast 360 frímerki á hverja síðu.

23 Á eina blaðsíðu komast 30 frímerki.
Á 6 blaðsíður komast $6 \cdot 30 = 180$ frímerki.

24 $18 = 6 + 12$ Það komast 180 frímerki á 6 blaðsíður.
Það komast 360 frímerki á 12 blaðsíður. $\left. \begin{array}{l} \\ \end{array} \right\} 180 + 360 = 540$

25 $2 \cdot 14 = 28$

$17 \cdot 5 = 85$

26 a $4 \cdot 26 = 104$

$15 \cdot 3 = 45$

$6 \cdot 32 = 192$

b $52 = 2 \cdot 26 \Rightarrow 2 \cdot 104 = 208$

$7 \cdot 18 = 126$

$21 \cdot 6 = 126$

c $6 \cdot 52 = 312$

$52 \cdot 6 = 312$

$8 \cdot 19 = 152$

$25 \cdot 7 = 175$

$5 \cdot 44 = 220$

$3 \cdot 78 = 234$

$27 \cdot 4 = 108$

$34 \cdot 4 = 136$

$17 \cdot 8 = 136$

$7 \cdot 12 = 84$

$9 \cdot 19 = 171$

Bls. 24

27 Talan breytist ekkert.

28 Svarið verður alltaf 0.

29 $1 \cdot 9 = \underline{9}$ $9 \cdot 1 = \underline{9}$ $23 \cdot 1 = \underline{23}$ $1 \cdot 23 = \underline{23}$

$0 \cdot 69 = \underline{0}$ $69 \cdot 0 = \underline{0}$ $0 \cdot 57 = \underline{0}$ $57 \cdot 0 = \underline{0}$

$13 = \underline{13} \cdot 1$ $13 = 13 \cdot \underline{1}$ $0 \cdot 134 = \underline{0}$ $0 = 134 \cdot \underline{0}$

- 30** **a** 5
b 10
c 50
d 500

31

·	1	10	100
3	3	30	300
7	7	70	700
10	10	100	1000
12	12	120	1200
17	17	170	1700
22	22	220	2200
40	40	400	4000
55	55	550	5500
67	67	670	6700
82	82	820	8200

Bls. 25



- a** lengd 9 m breidd 5 m
b 28 metra
c 45 fermetrar
- 33** **b** 2 m
c 18 fermetrar
d 27 fermetra

34

4 beð

25 kartöflur

$4 \cdot 25 =$

$4 \cdot 20 = 80$

Hún getur sett niður 100 kartöflur.

$4 \cdot 5 = 20$

$80 + 20 = 100$

35 a 5 beð

b $(5 \cdot 20)$ $(20 \cdot 5)$ $(10 \cdot 10)$ $(25 \cdot 4)$ $(4 \cdot 25)$

$(2 \cdot 50)$ $(50 \cdot 2)$ $(100 \cdot 1)$ $(1 \cdot 100)$

Bls. 26**36 a** $12 + 27 = 40$ Það eru 40 gestir. $40 : 4 = 10$
Það verður spilað á 10 borðum.**b** $26 + 50 = 76$ Það eru 76 gestir.
Það þarf 20 borð fyrir 80 gesti. Það þarf 19 borð.**c** Einn lítri fyrir 5, tveir fyrir 10, 4 fyrir 20 og 8 lítra fyrir 40 manns.
Það þarf 8 lítra.**d** Einn lítri fyrir 5, $5 \cdot 15 = 75$ 15 lítrar dugar fyrir 75 manns.
Það þarf 16 lítra.**e**

1 kaka	2	4	5
8 manns	16	32	40

Það þarf fimm kökur.

f

1 kaka	2	4	5	10	9
8 manns	16	32	40	80	72

Það þarf 10 kökur

g Það verða 5 lið.**h** Gestirnir eru 50.

Hægt er að skipta þeim í fimm lið með 10 manns eða tvö lið með 25 manns.

37 $4 \cdot 10 = 8 \cdot \underline{5}$ $5 \cdot 10 = 2 \cdot \underline{20}$ $2 \cdot \underline{18} = 4 \cdot 9$
 $2 \cdot 12 = 4 \cdot \underline{6}$ $6 \cdot 8 = \underline{3} \cdot 16$ $3 \cdot 10 = \underline{6} \cdot 5$
 $3 \cdot \underline{20} = 6 \cdot 10$ $4 \cdot 7 = \underline{2} \cdot 14$ $12 \cdot 3 = \underline{6} \cdot 6$

Bls. 27

38 **a** 20 kúlur. 6 manns, $3 \cdot 6 = 18$ $18 + 2 = 20$
b 26 kúlur. 6 manns, $4 \cdot 6 = 24$ $24 + 2 = 26$

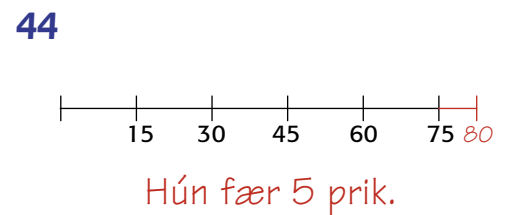
39 $30 : 3 = 10$
 30 pillur endast í 10 daga.
 90 pillur endast í 30 daga.
 9 pillur endast í 3 daga.
 100 pillur endast í 33 daga.

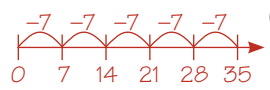
42 $80 : 8 = 10$ poka
 $120 : 8 = 15$ poka
 $200 = 80 + 120$
 $200 : 8 = 25$ poka

40 25 kleinum skipt í 4 hluta eru 6 á mann og ein verður afgang.

43 $20 : 5 = 4$ klst.
 $65 : 5 = 13$ klst.
 $90 : 5 = 18$ klst.

41 $100 = 4 \cdot \underline{?}$
 $4 \cdot 20 = 80$ 25 kleinur
 $4 \cdot 5 = 20$



45 **a**  **c**
 Svarið er 5.

$8 \cdot 7 = 56$
 $56 : 8 = 7$

e $7 \cdot 6 = 63$
 Svarið er því 7.

b $6 \cdot 7 = 42$
 Svarið er 7 og 1 í afgang.

d $4 \cdot 7 = 28$
 $4 \cdot 8 = 32$
 Svarið er 8 og 1 í afgang.

f
$$\begin{array}{r} 11 \\ 4 \overline{) 47} \\ \underline{-4} \\ 7 \\ \underline{-4} \\ 3 \end{array}$$
 Svarið er 11 og 1 í afgang.

Bls. 28

- 46** 52 spil.
4 spilategundir.
13 spil af hverri tegund.

47 $4 \cdot 13 = \underline{52}$ $4 \cdot \underline{13} = 52$ $52 : 4 = \underline{13}$ $52 : \underline{4} = 13$
 $13 \cdot 4 = \underline{52}$ $13 \cdot \underline{4} = 52$ $52 : 13 = \underline{4}$ $52 : \underline{13} = 4$

48 $4 \cdot 15 = \underline{60}$ $4 \cdot \underline{15} = 60$ $60 : 4 = \underline{15}$ $60 : \underline{4} = 15$
 $15 \cdot 4 = \underline{60}$ $15 \cdot \underline{4} = \cancel{52} 60$ $60 : 15 = \underline{4}$ $60 : \underline{15} = \cancel{15} 4$

Ath. Hér er villa í grunnbók í prentun 2010.

49 $11 \cdot 5 = \underline{55}$ **50** $7 \cdot 13 = \underline{91}$ **51** $195 : 13 = \underline{15}$
 $55 : 11 = \underline{5}$ $91 : 13 = \underline{7}$ $13 \cdot 15 = \underline{195}$
 $55 : 5 = \underline{11}$ $13 \cdot 7 = \underline{91}$ $195 : 15 = \underline{13}$
 $550 : 5 = \underline{110}$ $91 \cdot \cancel{130} : 7 = \underline{18} \text{ afg. } 4$ $1950 : 150 = \underline{13}$

Ath. Hér er villa í grunnbók í prentun 2010.

52 $8 \cdot 6 = \underline{48}$ $\underline{48} : 8 = 6$

$10 \cdot 9 = \underline{90}$ $\underline{90} : 10 = 9$

$7 \cdot 9 = \underline{63}$ $\underline{63} : 7 = 9$

$5 \cdot 11 = \underline{55}$ $\underline{55} : 11 = 5$

$40 : 4 = \underline{10}$ $4 \cdot \underline{10} = 40$

$27 : 9 = \underline{3}$ $9 \cdot \underline{3} = 27$

53 a 11

b 4

c 4

d 2

54 a 12

b 6

c 7

d 14

55 a 3

b 10

c 13

d 2

56 a 3

b 4

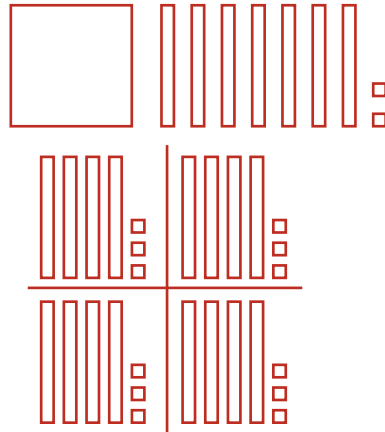
c $48 : 12 = 4$

d 4

Ath. Hér er villa í grunnbók í prentun 2010.

Bls. 29

- 57** Skipti plötunni í 10 tugalengjur.
Set 4 tugalengjur í hvert hólf.
Ein lengja eftir sem skipt er í
einingar. 12 einingum skipt.
3 einingar í hvert hólf.
Hver krakki fær 43 frímerki.



- | | | | |
|----------------|----------------|----------------|----------------|
| 58 a 31 | 59 a 28 | 60 a 44 | 61 a 21 |
| b 34 | b 25 | b 46 | b 22 |
| c 37 | c 35 | c 55 | c 32 |

- 62** 30 öskjur.

- 63** $20 : 4 = \underline{5}$ afg. $\underline{0}$ $55 : 5 = \underline{11}$ afg. $\underline{0}$ $110 : 5 = \underline{22}$ afg. $\underline{0}$
 $72 : 9 = \underline{8}$ afg. $\underline{0}$ $46 : 4 \approx \underline{11}$ afg. $\underline{2}$ $152 : 10 \approx \underline{15}$ afg. $\underline{2}$
 $36 : 6 = \underline{6}$ afg. $\underline{0}$ $45 : 3 = \underline{15}$ afg. $\underline{0}$ $207 : 20 \approx \underline{10}$ afg. $\underline{7}$

- 64** Dæmi um lausn.
Veigar og fjórir vinir hans hafa gaman af því að teikna. Þeir eiga 72 blöð sem þeir skipta á milli sín. Hve mörg blöð fær hver þeirra?

Lausn

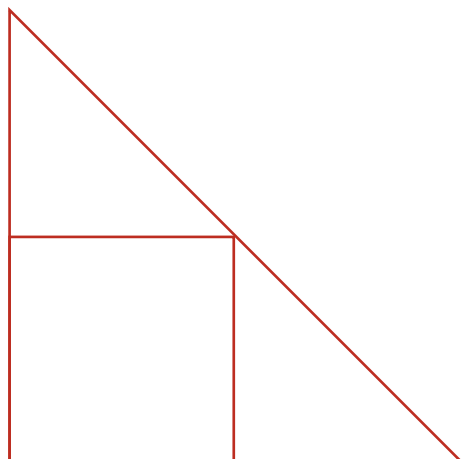
Fyrst fær hver 8 blöð $5 \cdot 8 = 40$
32 blöð eru eftir. $5 \cdot 6 = 30$
Hver fær 6 blöð í viðbót og eftir verða 2 blöð.
 $8 + 6 = 14$ blöð á mann.

- 65 a** Dæmi Sigrúnar 108. Dæmi Helga 50.

Rúmfræði og þrívídd

Bls. 31

1



2

Fjöldi búta	2	3	4
Form			

Bls. 32

- 3 a 6 fleti
 b 12 brúnir
 c 8 horn
 d Hann veltur
 e Já

4 a

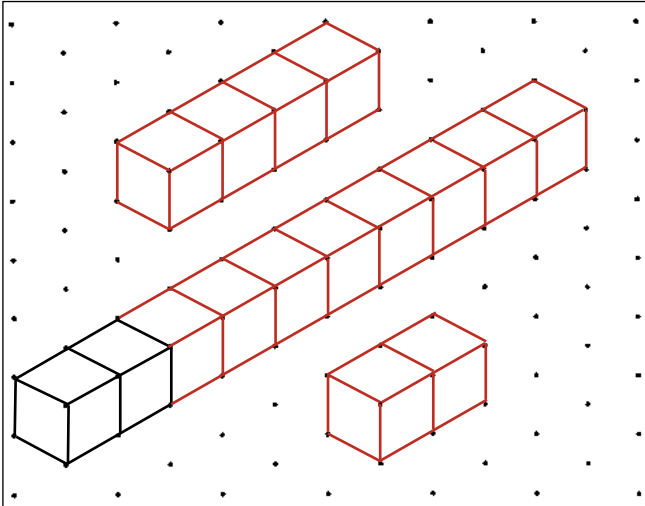


5

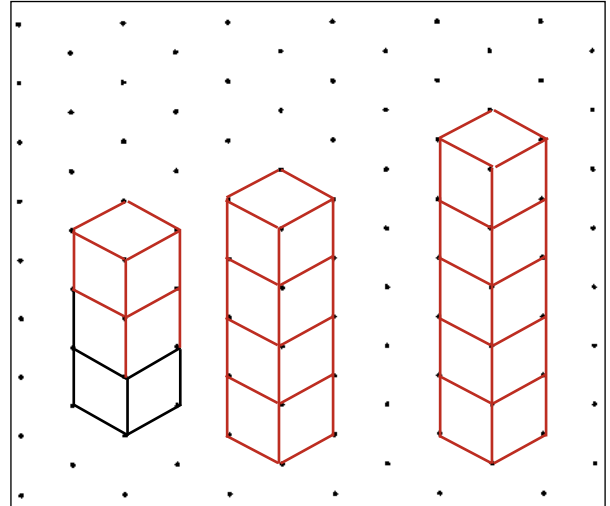


Bls. 33

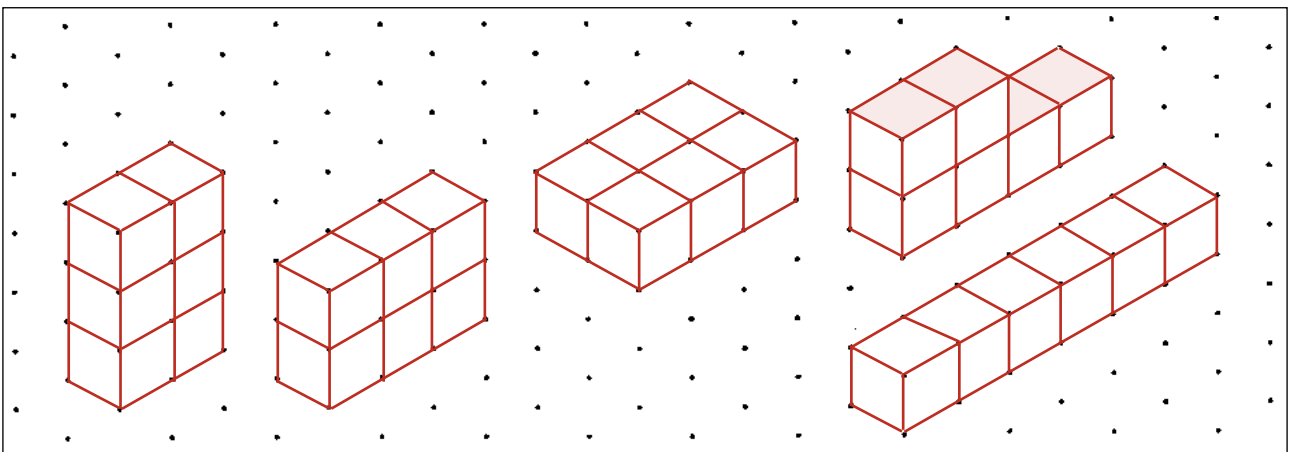
6



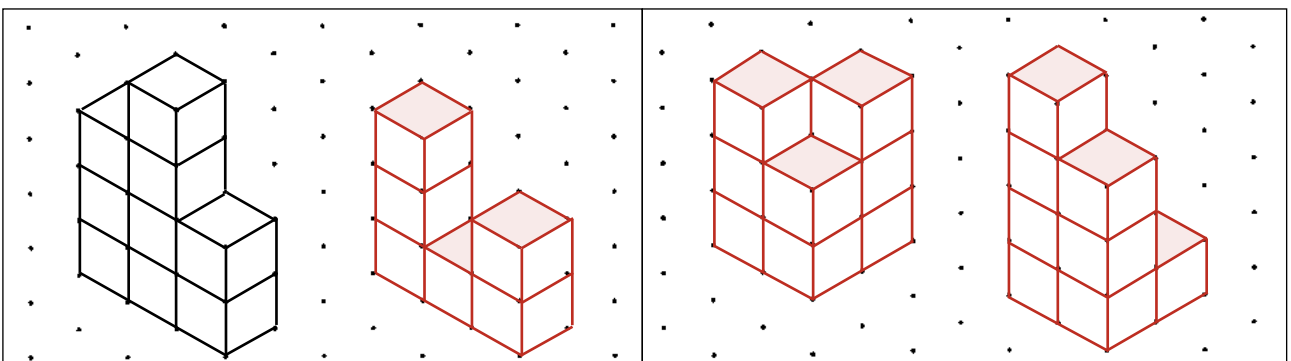
7



8



9



Bls. 34

10 a 4 horn

b 8 rör
5 horn

c 12 rör

d Hægt er að búa til sívalning úr 5–6 jafnlöngum rörum.

11 a 12 rör

b 9 rör

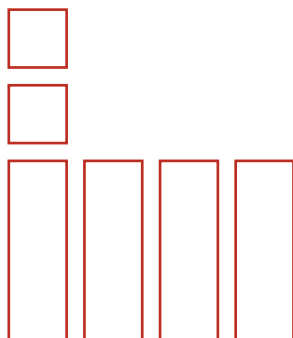
c Margar lausnir.

d Margar lausnir.

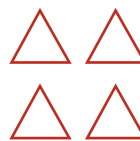
12 Byggingin er gerð úr nokkrum sívalningum sem tengjast saman með rétthyrningum. Ofan á er hálfkúla.

Bls. 35

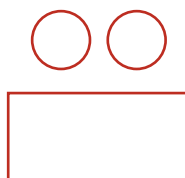
13 ferstrendingur



píramídi



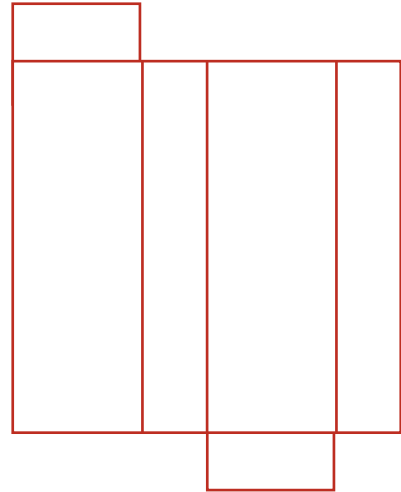
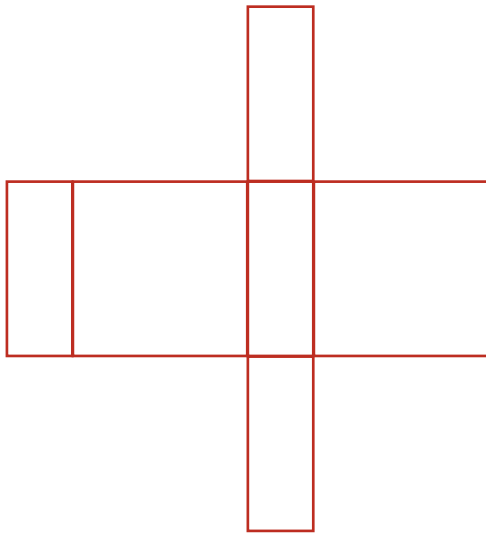
sívalningur



keila



14



Bls. 36

15 ① Allar hliðar jafn langar.

② Fjögur horn rétt.

③ Allar hliðar jafn langar.

④ Sama lögun.

⑤ Fjórar hliðar.

⑥ Tvær hliðar eins.

16 ① Báðir ferstrendingar.

② Allar hliðar formanna eru eins.

③ Hæð formanna sú sama.

④ Hæð formanna er sú sama

⑤ Hæð formanna sú sama.

⑥ Tvær hliðar eins.

17 Allar hliðar jafn langar og öll horn jafn stór.

Bls. 37

18 8 kubbar

19 27 kubbar

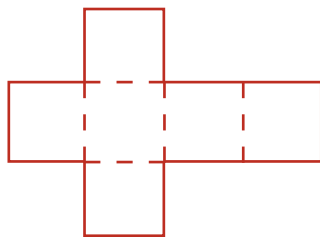
20 Breytileg svör

21

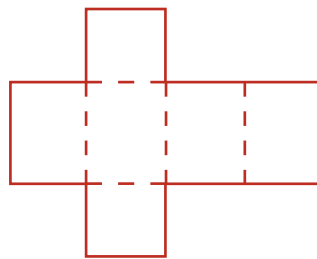
	lengd	breidd	hæð	kubbar alls
A	9	2	2	36
B	3	3	4	36
C	6	3	2	36

Þeir eru allir jafnstórir

22



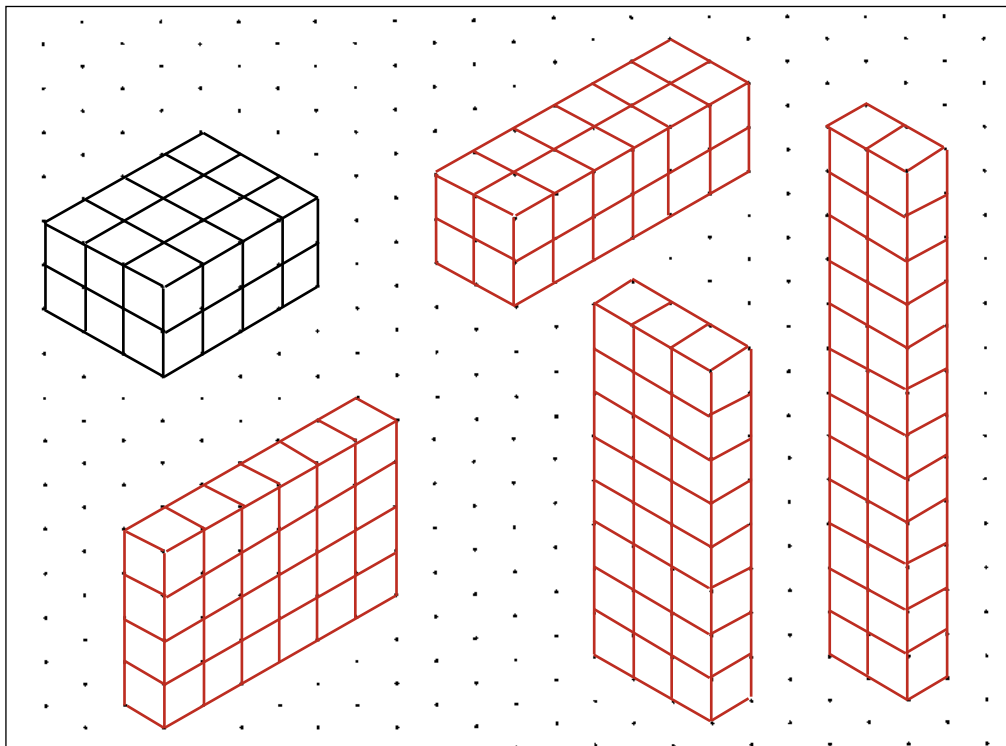
64 kubbar



60 kubbar

Bls. 38

23

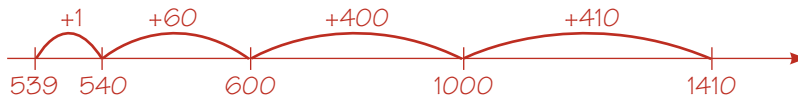


Reikniaðgerðir

Bls. 39

1 $800 + 456 + 315 + 485$
 $800 + 456 + 800 = 1600 + 456 = 2056$ kr.

2 a Töfrasproti kostar 539.



$410 + 400 + 60 + 1 = 871$
Hún á 871 kr. afgang.

b $315 + 485 = 800$
Hún á nóg fyrir því.

Bls. 40

5

573

$286 + 287$

905

$452 + 453$

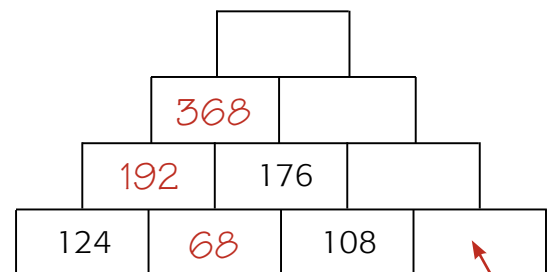
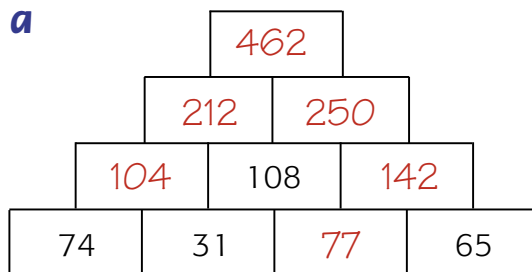
399

$199 + 200$

733

$366 + 367$

6 a



Nemendur
velja sjálfir tölu.

b Fyrri veggurinn verður eins
hjá öllum en ekki sá seinni.
Margar lausnir.

7 a $330 + 640 = 970$
 $970 - 5 = 965$

b $1300 + 500 = 1800$
 $40 + 20 = 60$
 $8 + 4 = 12$
 $1800 + 60 + 12 = 1872$

c $12 + 88 = 100$
 $200 + 700 = 900$
 $900 + 100 = 1000$

8 a 3803

b 2035

c 8839

9 a 1548

b 5311

c 1082

10 a 921

b 4120

c 7903

Bls. 41

11 a 18

63

94

Dæmi um svör.

42

$63 - 36 = 27$

$94 - 49 = 45$

$42 - 24 = 18$

b Öll svörin eru margfeldi af 9.

c $1 + 8 = 9$
 $2 + 7 = 9$

$5 + 4 = 9$
 $4 + 5 = 9$

Hvað kemur í ljós? Svarið er alltaf 9.

d 99

$27 + 72 = 99$

$36 + 63 = 99$

$63 + 36 = 99$

$45 + 54 = 99$

$59 + 45 = 99$

$90 + 9 = 99$

12 a $31 + 46 = 77$

$77 - 31 = 46$

$77 - 46 = 31$

b $231 + 46 = 277$

$277 - 231 = 46$

$277 - 46 = 231$

13 a 74

b 66

c 58

9 a 54

b 46

c 29

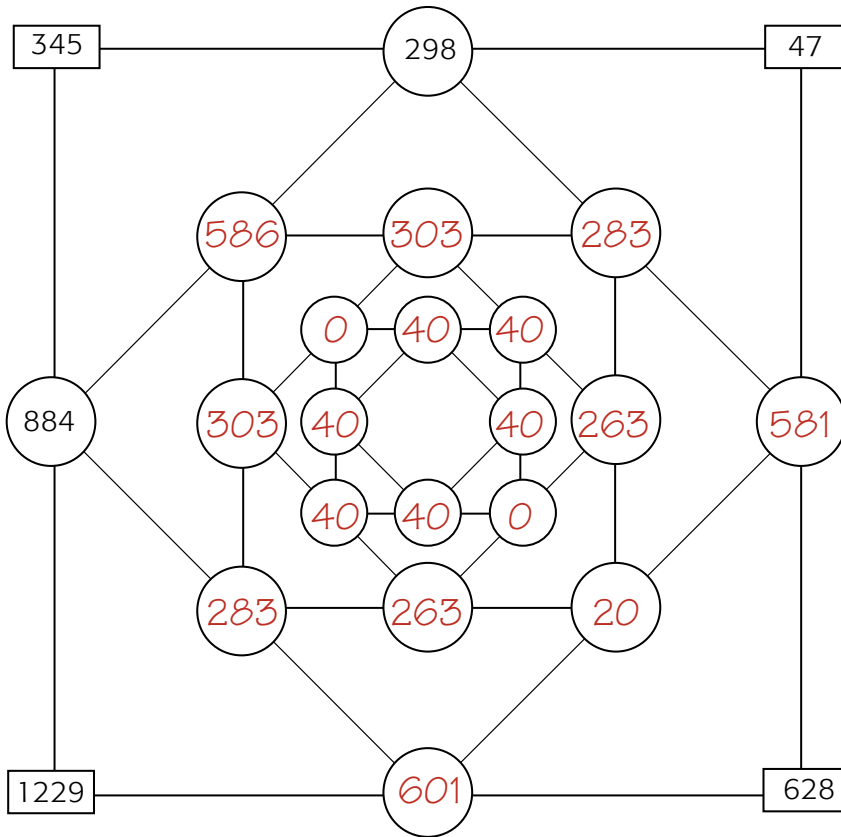
10 a 119

b 74

c 72

Bls. 42

16 a

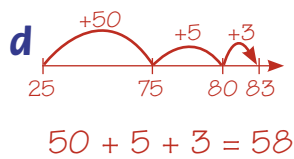


b Margar lausnir.

17 Breytileg svör.

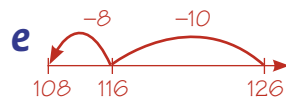
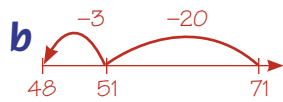
Bls. 43

18 a $47 - 20 = 27$
 $47 - 19 = 28$



19 a
$$\begin{array}{r} 284 \\ - 37 \\ \hline 247 \end{array}$$

d $300 - 200 = 100$
 $54 - 30 = 24$
 $124 - 8 = 116$



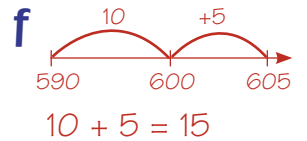
b $35 - 29 = 6$
 $735 - 29 = 706$

e $900 - 540 = 460$
 $460 - 2 = 458$

c $100 - 35 = 65$
 $99 - 35 = 64$

f
$$\begin{array}{r} 427 \\ - 82 \\ \hline 345 \end{array}$$

c $915 - 100 = 815$
 $815 - 5 = 810$



20 a 375 g

d 83 ml

b 149 cm

e 71 cm

c 242 ml

f 600 g

Bls. 44

21 a

mynd	tölur	orð
	$233 + 70 = 303$ $303 + 12 = 315$ $70 + 12 = 82$	<p>Ég bæti 70 kr. við 233 kr. Þá eru komnar 303 kr. Þá vantar 12 kr. upp á 315 kr. Alls bæti ég við 82 kr.</p>

21 a

mynd	tölur	orð
	$3 \cdot 50 = 150$ $6 \cdot 10 = 60$ $1 \cdot 5 = 5$ <hr/> 10 215 of lágt $2 \cdot 100 = 150$ $1 \cdot 50 = 50$ $6 \cdot 10 = 60$ $1 \cdot 5 = 5$ <hr/> 10 315	<p>Hún gæti átt 100 kr. 50 kr. 10 kr. og 5 kr. Með því að prófa finn ég að tveir hundraðkallar, einn fimmtíukall, sex tíkallar og einn fimmkall eru 10 peningar og 315 kr.</p>

Bls. 45

23 170
 1200
 200
 420
 1990

24 Breytileg svör.

25 Breytileg svör.

26

	A	B	C	D	E
1	Seldir kaffibollar	Ágóði	Seldar flatkukur	Ágóði	Heildarágóði
2	20	800	20	1200	2000
3	30	1200	10	600	1800
4	10	400	30	1800	2200
5	15	600	25	1500	2100
6	25	1000	15	900	1900

27 Lituðu reitirnir í töflunni sýna heildarágóða sem dugar fyrir kaupum á leikföngum.
 Lita reiti með 2000, 2200 og 2100.

28 Ágóðinn yrði sá sami ef kaffibollar og flatkøkubitar eru jafn margir.
 Ef kaffibollar eru fleiri en flatkøkubitar þá verður ágóðinn meiri en minni ef flatkøkubitar eru fleiri en kaffibollar.

29 Ef seldir eru 30 bollar af kaffi og 20 flatkukur verður ágóðinn:
 $1200 + 1200 = 2400$.

30 Breytileg svör – nemendur setja sjálfir inn tölur.

Bls. 46

31 114 ár Svör miðast við árið 2010

32 a

2000	20 <u>04</u>	2008	2012	2016	2020	2024	2028	2032
------	--------------	------	------	------	------	------	------	------

b

2002	2006	2010	2014	2018	2022	2026	2030	2034
------	------	------	------	------	------	------	------	------

33 a $10 \cdot 400 + 5 \cdot 400 = 4000 + 2000 = 6000$

b $1000 \text{ m} = 1 \text{ km}$ $6000 \text{ m} = 6 \text{ km}$

34

	Fjöldi þátttakenda	10	15	20	25	30	35	40
400 m hlaup		4000	6000	8000	10000	12000	14000	16000
m		4	6	8	10	12	14	16
km		4	6	8	10	12	14	16

35

6000 m	10 km	14000 m
15	25	35
16000 m	8 km	12 km
40	20	30

Bls. 47

36 a

•	3	6	9	12	15
3	9	18	27	36	45
6	18	36	54	72	90
9	27	54	81	108	135
12	36	72	108	144	180
15	45	90	135	180	225

b Vegna þess að bæði $6 \cdot 9$ og $9 \cdot 6$ eru jafn og 54

c Þetta eru sömu tölurnar.

37 a $144 : 12 = \underline{12}$

c $108 : 12 = \underline{9}$

e $180 : 12 = \underline{15}$

b $72 : 12 = \underline{6}$

d $45 : 3 = \underline{15}$

f $18 : 6 = \underline{3}$

38 a $9 \cdot \underline{15} = 135$

b $\underline{15} \cdot 6 = 90$

c $15 \cdot \underline{15} = 225$

39 $6 \cdot 11 = 66$

40 $7 \cdot 12 = 84$

41 $25 \cdot 37 = 925$

a $66 : 6 = \underline{11}$

a $84 : 7 = \underline{12}$

a $925 : \underline{37} = 25$

b $66 : \underline{11} = 6$

b $84 : \underline{12} = 7$

b $925 : 37 = \underline{25}$

42 a 16

43 a 64

44 a 24

b 32

b 96

b 120

c 32

c 12

c 72

d 32

d $96 : 8 = 12$

d 192

e 32

e 96

e 192

Bls. 48

45 a $50 + 4 + 80 + 5$
 $130 + 9 = 139$

e $40 + 6 + 70 + 4$
 $110 + 10 = 120$

b $130 + 8 + 8 + 80 + 2$
 $130 + 80 + 10 = 220$

f $150 + 62$
 $150 + 60 + 2 = 212$

c $85 - 50 = 35$
 $35 - 4 = 31$

g $74 - 40 = 34$
 $34 - 6 = 28$

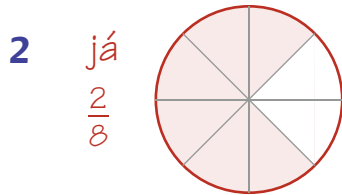
d $82 = 30 + 50 + 2$
 $138 - 30 = 108$
 $108 - 52 = 56$

h $63 = 40 + 20 + 3$
 $149 - 40 = 109$
 $109 - 23 = 86$

46 a-d Breytileg svör.

Almenn brot

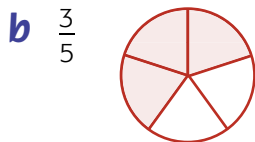
Bls. 49



3 a $\frac{3}{8}$

b $\frac{1}{2}$

c $\frac{2}{6}$



5 $\frac{5}{7}$

Bls. 50



e

Breytileg svör

7 a Já hún fær $\frac{1}{6}$ en Auður $\frac{1}{3}$.

b Í fjölskyldu Auðar.

c Í fjölskyldu Hörpu.

Bls. 51

8



3



4



8



12

9



$\frac{1}{8}$



$\frac{2}{7}$



$\frac{4}{5}$



$\frac{2}{5}$

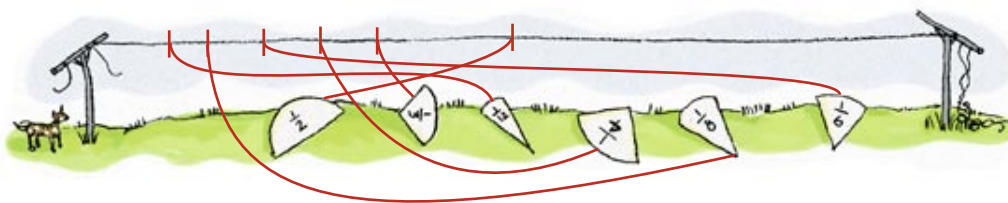


$\frac{5}{7}$



$\frac{2}{6}$

10



11

$$\frac{1}{4} > \frac{1}{6}$$

$$\frac{1}{3} > \frac{1}{7}$$

$$\frac{1}{8} < \frac{1}{7}$$

$$\frac{1}{3} < \frac{1}{6}$$

$$\frac{2}{4} < \frac{3}{4}$$

$$\frac{3}{5} < \frac{4}{5}$$

$$\frac{2}{3} > \frac{2}{5}$$

$$\frac{2}{4} < \frac{3}{5}$$

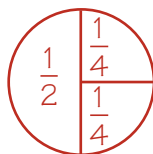
12 Margar lausnir.

13 Margar lausnir.

Bls. 52

14

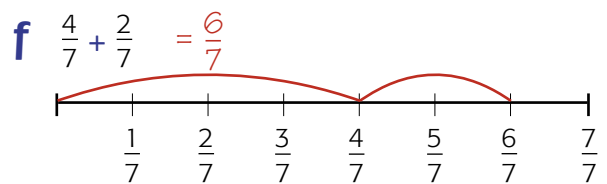
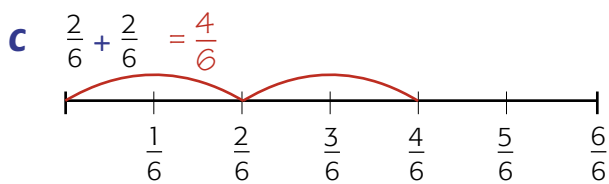
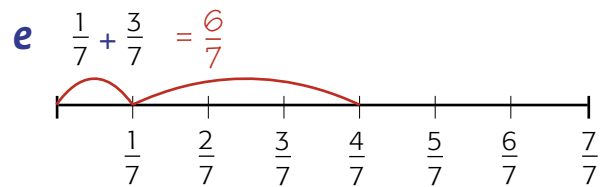
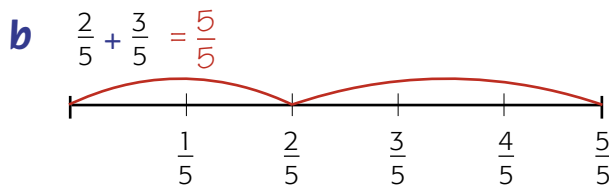
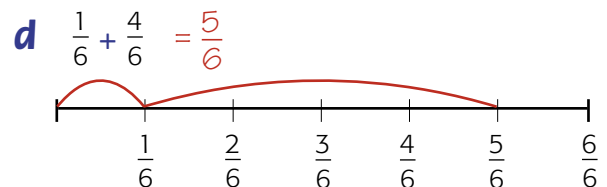
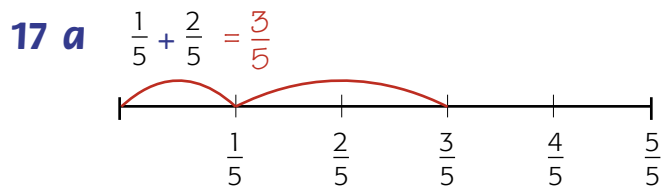
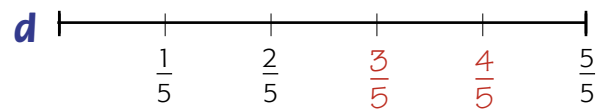
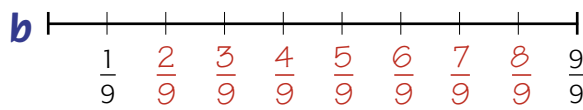
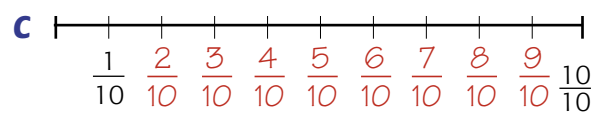
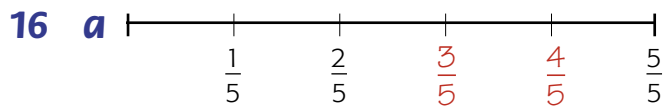
$\frac{1}{4}$



15

Já

$\frac{1}{3}$	$\frac{1}{6}$	$\frac{1}{3}$



Bls. 53

- 18** 5 af 18 eða $\frac{5}{18}$ 10 af 18 eða $\frac{10}{18}$
 7 af 18 eða $\frac{6}{18}$ 2 af 18 eða $\frac{2}{18}$
 4 af 18 eða $\frac{4}{18}$ 1 af 18 eða $\frac{1}{18}$

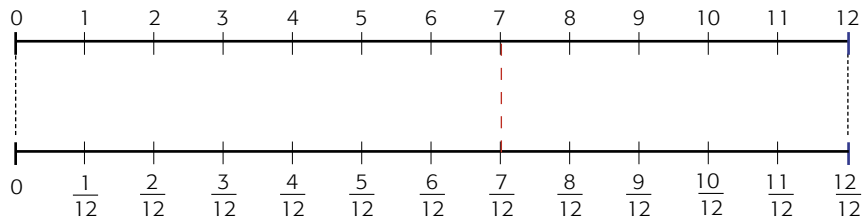
19 Dæmi um svar.
 Hve stór hluti er á leið inn á leikvöllinn eða í snú-snú?

20 Hve stór hluti barnanna er á leiðinni inn á leikvöllinn?

21–22 Breytileg svör.

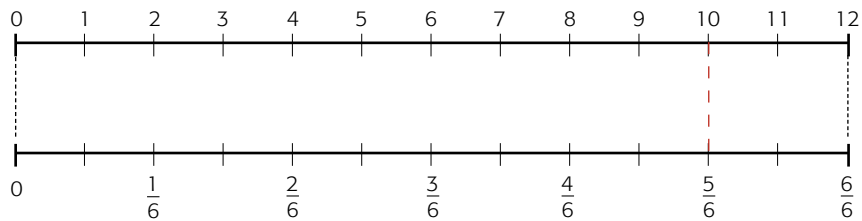
Bls. 54

23 a



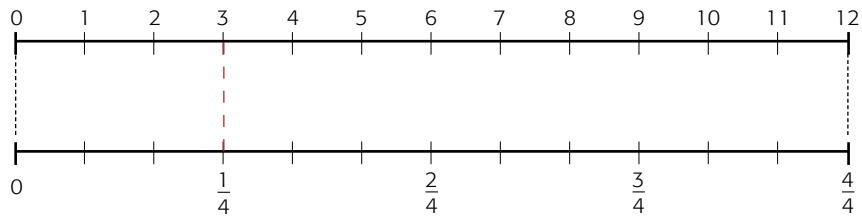
7 æfa sund
7 nemendur

b



10 nemendur

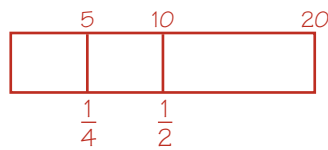
c



3 nemendur

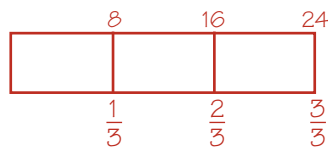
24

Það eru 5 nemendur



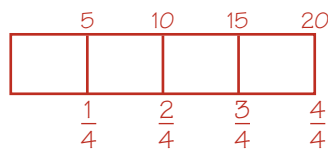
25

Það eru 24 nemendur



26

Það eru 20 nemendur



27

Breytileg svör.

Bls. 55

29 a $\frac{1}{6}$

b Þrjá

c Tvo

d $\frac{3}{4}$

e Þau eru jafn stór

f $\frac{3}{6}$ eru minni en $\frac{3}{5}$

30 $\frac{1}{4}, \frac{3}{5}, \frac{2}{3} = \frac{4}{6}, \frac{3}{4}, \frac{1}{1}$

31 a $\frac{1}{3}$

e Fimmti hluti er stærri en sjötti hluti.

b $\frac{1}{2}$

f Þriðjungur er minni en helmingur.

c $\frac{1}{6}$

g Þriðjungur er jafn stór og tveir sjöttu hlutar.

d $\frac{4}{5}$

h Helmingur og tveir fjórðungar eru einn heill.

Bls. 56
32

$\frac{1}{2}$					$\frac{2}{2}$																
$\frac{1}{3}$			$\frac{2}{3}$			$\frac{3}{3}$															
$\frac{1}{4}$		$\frac{2}{4}$		$\frac{3}{4}$		$\frac{4}{4}$															
$\frac{1}{5}$		$\frac{2}{5}$		$\frac{3}{5}$		$\frac{4}{5}$		$\frac{5}{5}$													
$\frac{1}{6}$		$\frac{2}{6}$		$\frac{3}{6}$		$\frac{4}{6}$		$\frac{5}{6}$		$\frac{6}{6}$											
$\frac{1}{7}$		$\frac{2}{7}$		$\frac{3}{7}$		$\frac{4}{7}$		$\frac{5}{7}$		$\frac{6}{7}$	$\frac{7}{7}$										
$\frac{1}{8}$		$\frac{2}{8}$		$\frac{3}{8}$		$\frac{4}{8}$		$\frac{5}{8}$		$\frac{6}{8}$		$\frac{7}{8}$	$\frac{8}{8}$								
$\frac{1}{9}$		$\frac{2}{9}$		$\frac{3}{9}$		$\frac{4}{9}$		$\frac{5}{9}$		$\frac{6}{9}$		$\frac{7}{9}$		$\frac{8}{9}$	$\frac{9}{9}$						
$\frac{1}{10}$		$\frac{2}{10}$		$\frac{3}{10}$		$\frac{4}{10}$		$\frac{5}{10}$		$\frac{6}{10}$		$\frac{7}{10}$		$\frac{8}{10}$		$\frac{9}{10}$	$\frac{10}{10}$				
$\frac{1}{12}$		$\frac{2}{12}$		$\frac{3}{12}$		$\frac{4}{12}$		$\frac{5}{12}$		$\frac{6}{12}$		$\frac{7}{12}$		$\frac{8}{12}$		$\frac{9}{12}$		$\frac{10}{12}$		$\frac{11}{12}$	$\frac{12}{12}$

33 $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10} = \frac{6}{12}$ $\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$

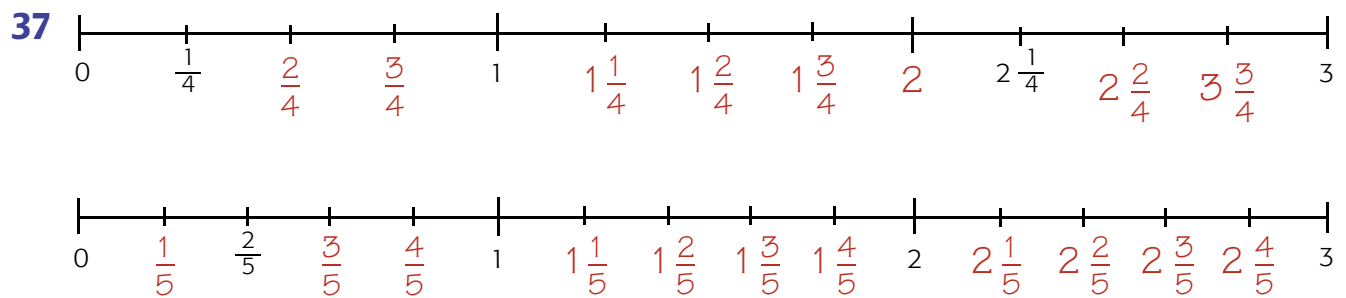
$\frac{9}{12} = \frac{6}{8} = \frac{3}{4}$ $\frac{8}{10} = \frac{4}{5}$ $\frac{6}{9} = \frac{4}{6} = \frac{4}{5}$

34 $\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$ $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$ $\frac{3}{4} - \frac{1}{4} = \frac{1}{2}$
 $\frac{1}{3} + \frac{2}{3} = 1$ $\frac{3}{6} - \frac{3}{6} = 0$ $\frac{4}{12} + \frac{7}{12} = \frac{11}{12}$

35 $\frac{5}{7} < \frac{6}{8}$ $\frac{6}{10} = \frac{3}{5}$ $\frac{6}{10} > \frac{3}{6}$ $\frac{6}{7} > \frac{5}{8}$
 $\frac{2}{3} < \frac{4}{5}$ $\frac{2}{3} = \frac{6}{9}$ $\frac{2}{3} > \frac{5}{12}$ $\frac{2}{3} < \frac{8}{10}$

36 $\frac{2}{5}$ $\frac{3}{7}$ $\frac{4}{9}$ $\frac{5}{12}$

Bls. 57



38 $\frac{1}{4}$ l $\frac{2}{3}$ l $\frac{1}{2}$ l $\frac{3}{4}$ l



40 Helga, hann útskýrir vel.

Bls. 58

41 a $\frac{4}{5}$ c $\frac{4}{7}$

b $\frac{8}{10}$ d $\frac{2}{7}$

42 $\frac{2}{5}$ þýðir að lengjunni er skipt í fimm jafna hluta.

Þorsteinn fær tvo hluta.

$\frac{6}{5}$ þýðir meira en einn heill.

$\frac{5}{5}$ er ein lengja því er $\frac{1}{5}$ meira.

43 Allar, því þær sýna allar skiptingu þar sem hver fær $\frac{1}{4}$.

Mynstur og breytur

Bls. 59

1 a Já

b Nei

c Já

d Nei

e Nei

f Nei

g Já

h Breytileg svör

2 a 10

b 240, 260, 280, 300, 320, 340, 360, 380

3 650, 600, 550, 500, 450, 400, 350, 300, 250

4 480, 500, 520, 540, 560, 580, 600, 620, 640, 680, 700

5 a 15

b 50

c 40

d 20

Bls. 60

6 a $195 = 105 + 90 = 200 - 5 = 39 \cdot 5 = 205 - 5 - 5 = 100 + 90 + 5$

b $328 = 428 - 100 = 300 + 20 + 8 = 348 - 20 = 4 \cdot 82 = 500 - 172$

7 a 40

b 612

c 5

d 333

8 a 145

$200 - 55 = 600 - 455 = 60 + 40 + 45$

b 602

$702 - 100 = 1000 - 398 = 500 + 102$

9 Margar lausnir.

Bls. 61

10 a $14 + 13 = 13 + 14$

b $24 + 13 = 23 + 14$

c $52 + 42 = 53 + 41$

d $26 + 17 = 25 + 18$

e $26 + 17 = 27 + 16$

f $57 + 59 = 56 + 60$

11 a $488 + 89 = 487 + 90$

b $678 + 897 = 697 + 896$

c $365 + 918 = 370 + 913$

d $567 + 97 = 564 + 100$

e $788 + 698 = 786 + 700$

f $434 + 715 = 430 + 719$

12 a $45 - 19 = 46 - 20$

b $117 - 98 = 119 - 100$

c $288 - 102 = 286 - 100$

d $65 - 37 = 67 - 39$

e $34 - 28 = 54 - 48$

f $664 - 387 = 464 - 187$

13 a $78 - 36 = 78 - 38 + a$

38 eru 2 hærri en 36

Ef mismunurinn á að vera sá sami verður a að vera 2.

Hvernig má rökstyðja að bókstafurinn a standi fyrir töluna 2?

b $93 - 67 = 90 - 65 + b$

90 er 3 lægri en 93

65 er 2 lægri en 67 og því þarf að bæta einum við.

Hvernig má rökstyðja að bókstafurinn b standi fyrir töluna 1?

14 Satt s eða ó sattu.

$$586 - 539 = 86 - 39 \quad \text{S}$$

$$74 + 39 = 75 + 40 \quad \text{Ó}$$

$$50 \cdot 4 = 100 \cdot 2 \quad \text{S}$$

$$74 + 39 = 73 + 40 \quad \text{S}$$

$$59 + 37 = 69 + 27 \quad \text{S}$$

$$574 + 369 = 563 + 379 \quad \text{Ó}$$

$$507 - 408 = 208 - 107 \quad \text{Ó}$$

$$995 - 479 = 895 - 579 \quad \text{Ó}$$

Bls. 62

15 a 16, 32, 64, 128, 256, 512, 1024, 2048

b 7

c 10

16 a 3, 9, 27, 81, 243, 729, 2187, 6561

b 5

c 7

d 1, 4, 16, 64, 256, 1024, 4096

17 a 22, 27, 32, 37

Það bætast alltaf 5 við

b 149, 132, 115, 98

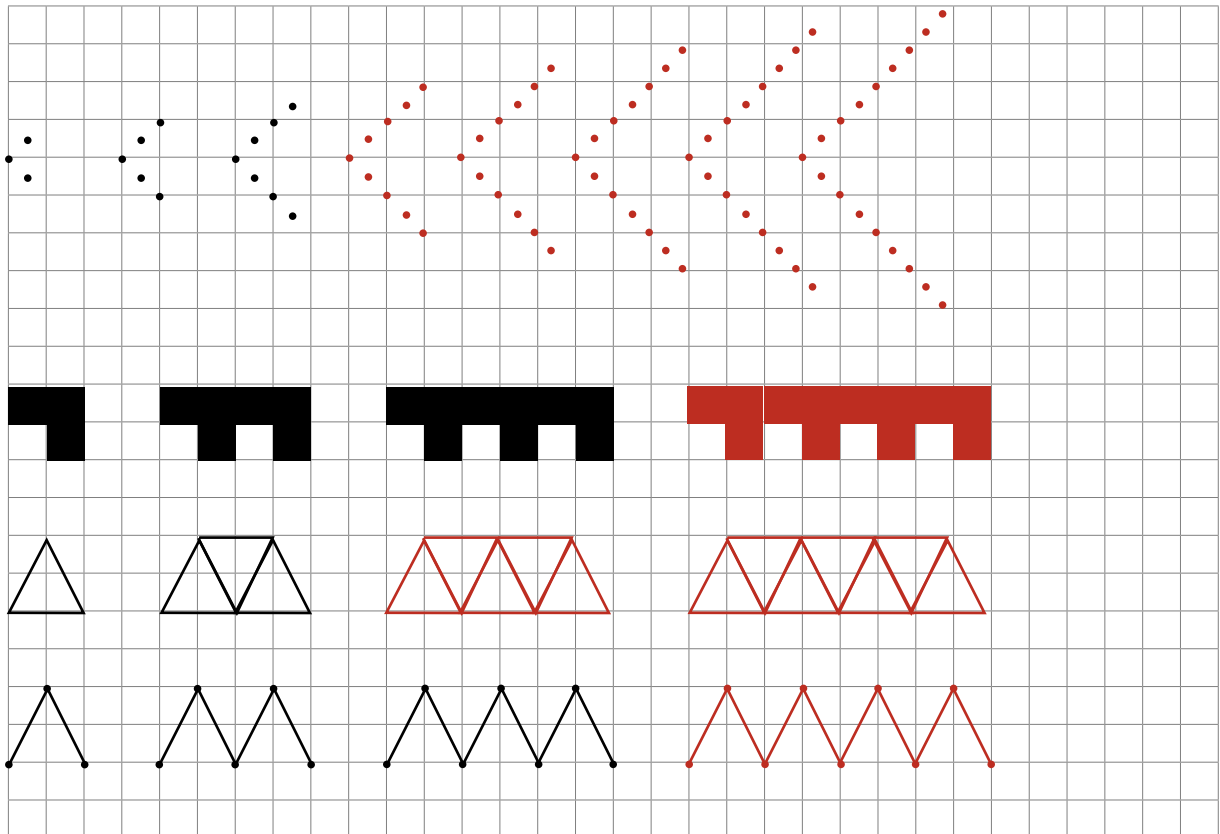
17 eru dregnir frá

18 a 23, 28, 33, 38, 43, 48, 53

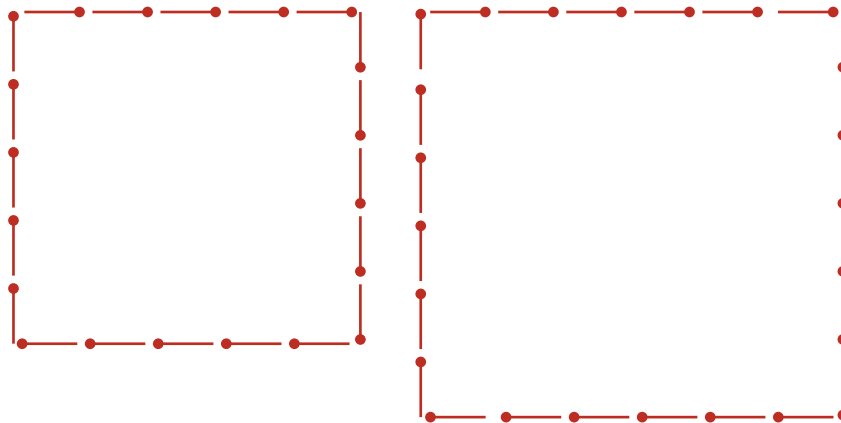
b 25, 32, 39, 46, 53

c Fyrri runan hækkar alltaf um 5. Seinni hækkar alltaf um 7. Þær mætast þegar 35 hafa bæst við hvora runu.

Bls. 63
19



20 a



b

Mynd	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Fjöldi	4	8	12	16	20	24	28	32	36	40
Aukning	4	4	4	4	4	4	4	4	4	4

24 á 6. mynd

40 á 10. mynd

Það bætast alltaf 4 við. Fjöldinn er fjórfalt númer myndarinnar.

Bls. 64

21 a $1 + 3 + 5 + \boxed{9} = 18$

e $2 + \boxed{6} + 4 + \boxed{6} = 18$

b $7 + 5 + \boxed{7} + 5 = 24$

f $8 + 10 + 2 + \boxed{4} = 24$

c $5 + 11 + 7 = \boxed{23}$

g $9 + \boxed{11} + 3 = \underline{3} + 18$

d $11 + 13 + \boxed{15} = 39$

h $\boxed{9} + \boxed{13} + \boxed{14} = 18 + 18$
Dæmi um lausn

22 a $\boxed{7, 8, \textcircled{9}}$

b $\boxed{12, 13, \textcircled{14}, 15}$

c $\boxed{21, 22, 23, 24, \textcircled{25}, 26}$

$32 + \boxed{9} = 41$

$47 - \boxed{14} = 33$

$\boxed{25} - 17 = 8$

23 a $\boxed{\underline{7}, \underline{8}, 9, 10}$

c $\boxed{12, 13, 14, \underline{15}}$

e $\boxed{\underline{21}, \underline{22}, \underline{23}, \underline{24}, 25, 26}$

$32 + \boxed{} < 41$

$47 - \boxed{} < 33$

$\boxed{} - 17 < 8$

b $\boxed{7, 8, 9, \underline{10}}$

c $\boxed{\underline{12}, \underline{13}, 14, 15}$

e $\boxed{21, 22, 23, 24, 25, \underline{26}}$

$32 + \boxed{} > 41$

$47 - \boxed{} > 33$

$\boxed{} - 17 > 8$

24 $90 \cdot \underline{9} < 850$

$90 \cdot 8 < 850$

$90 \cdot 7 < 850$

$90 \cdot 6 < 850$

Bls. 65

25 a $1, 2, 3$

e $6, 7, 8, 9, 10, 11, 12$

b $1, 2, 3$

f $1, 2, 3$

c $5, 6, 7$

g $1, 2, 3, 4, 5, 6$

d 8

h 6

26 a $4 \cdot \underline{\quad} = 20$ 5

e $25 + 8 + \underline{\quad} = 52$ 19

b $5 + \underline{\quad} < 12$ 1, 2, 3, 4, 5, 6

f $135 - \underline{\quad} = 85$ 50

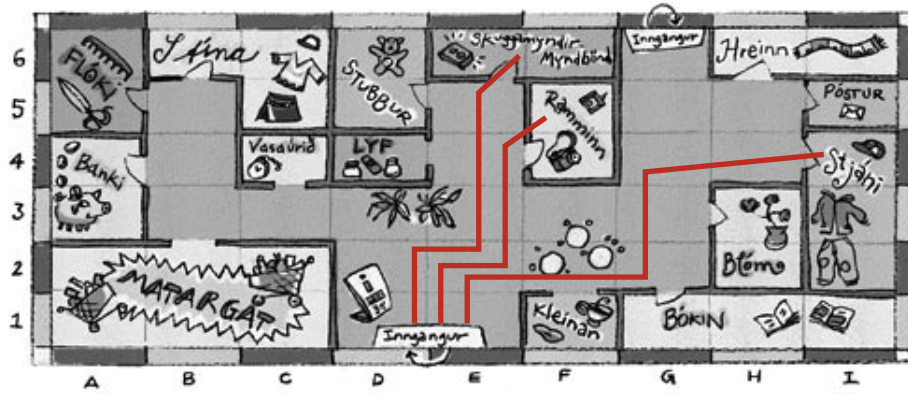
c $3 \cdot \underline{\quad} < 21$ 1, 2, 3, 4, 5, 6

g $82 - \underline{\quad} > 76$ 1, 2, 3, 4, 5

d $4 \cdot \underline{\quad} > 12$ 4, 5, 6, 7...

h $72 + \underline{\quad} > 76$ 5, 6, 7, 8...

Reitir og hnitakerfi



Bls. 66

2

Banki	A3 og A4
Bakarí	F1
Barnafataverslun	D5 og D6
Hreinsun	H6 og I6
Matvöruverslun	A1, A2, B1 B2, C1, C2

Apótek	D1
Póstur	I5
Innrömmun	F4 og F5
Hárgreiðsla	A5 og A6
Blómabúð	H2 og H3

Hvað er í G1, H1 og I1? *Bókin*

Hvað er í C4? *Vasaúrið*

Bls. 67

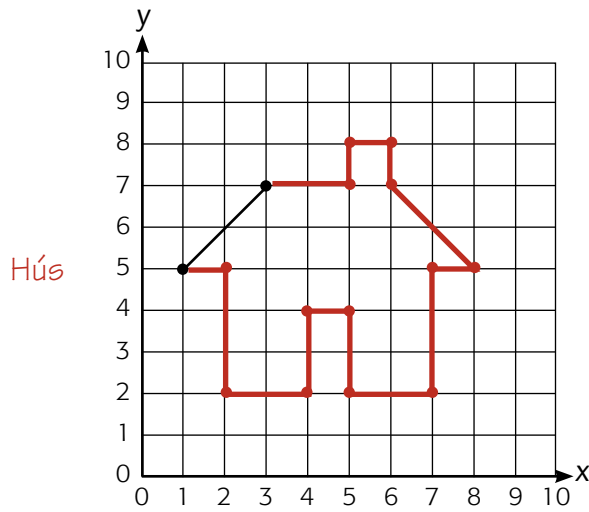
3 A (1,1) B (3,5) C (4,3) D (6,2)

4 Breytileg svör.

Bls. 68

5 bangsi	(1,9)	hjól	(6,1)
bikar	(4,8)	hnöttur	(8,3)
blóm	(1,7)	hús	(9,1)
bolli	(7,8)	ís	(1,4)
bók	(3,6)	pera	(9,9)
fill	(5,5)	stjarna	(5,9)
flugvél	(9,6)	taska	(2,2)
fugl	(4,3)	kubbur	(7,6)

6

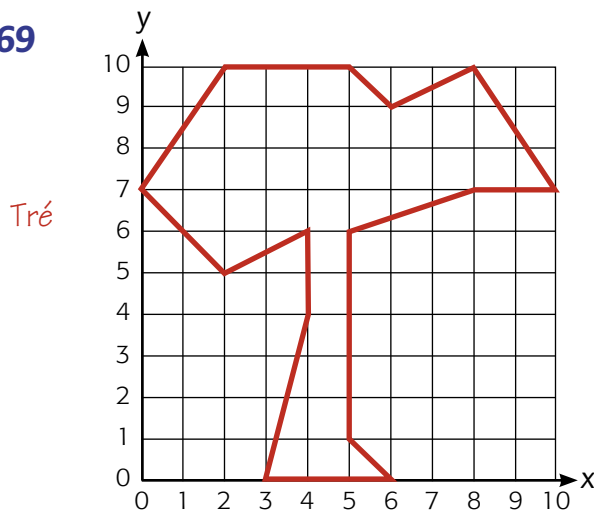


Hús

7 Breytileg svör.

Bls. 69

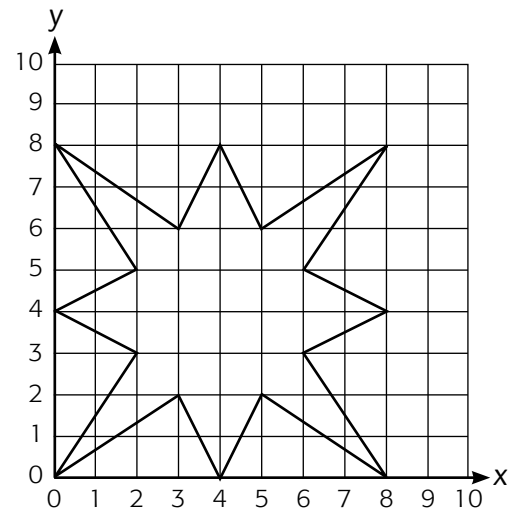
8



Tré

9

$(0,0) \rightarrow (2, \underline{3}) \rightarrow (\underline{0}, \underline{4}) \rightarrow (\underline{2}, \underline{5})$
 $\rightarrow (\underline{0}, \underline{8}) \rightarrow (\underline{3}, \underline{6}) \rightarrow (\underline{4}, \underline{8}) \rightarrow (\underline{5}, \underline{6})$
 $\rightarrow (\underline{8}, \underline{8}) \rightarrow (\underline{6}, \underline{5}) \rightarrow (\underline{8}, \underline{4}) \rightarrow (\underline{6}, \underline{3})$
 $\rightarrow (\underline{8}, \underline{0}) \rightarrow (\underline{5}, \underline{2}) \rightarrow (\underline{4}, \underline{0}) \rightarrow (\underline{3}, \underline{2})$



10 Leið b er styst.

Leið c er lengst.

$(1,1) \rightarrow (\underline{2}, \underline{1}) \rightarrow (\underline{2}, \underline{2}) \rightarrow (\underline{4}, \underline{2}) \rightarrow (\underline{4}, \underline{4})$
 $\rightarrow (\underline{5}, \underline{4}) \rightarrow (\underline{5}, \underline{6}) \rightarrow (\underline{6}, \underline{6}) \rightarrow (\underline{6}, \underline{7}) \rightarrow (\underline{8}, \underline{7})$

Bls. 70

11

Línurit

Súlurit

Skífurit

12 a 600 m

b 1800 m

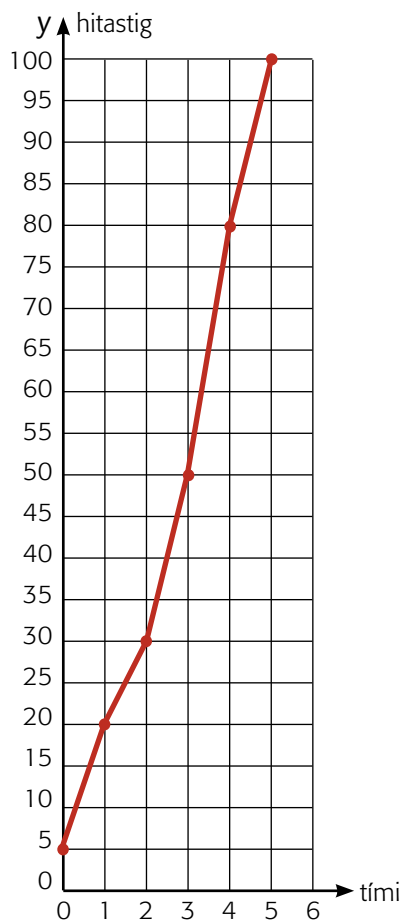
c 2800 m

d 2200 m

e 5 mínútur

Bls. 71

14 a



b 5 °C

c 30 °C

d 80 °C

e 100 °C

15 a 3 mínútur

b 3 mínútur

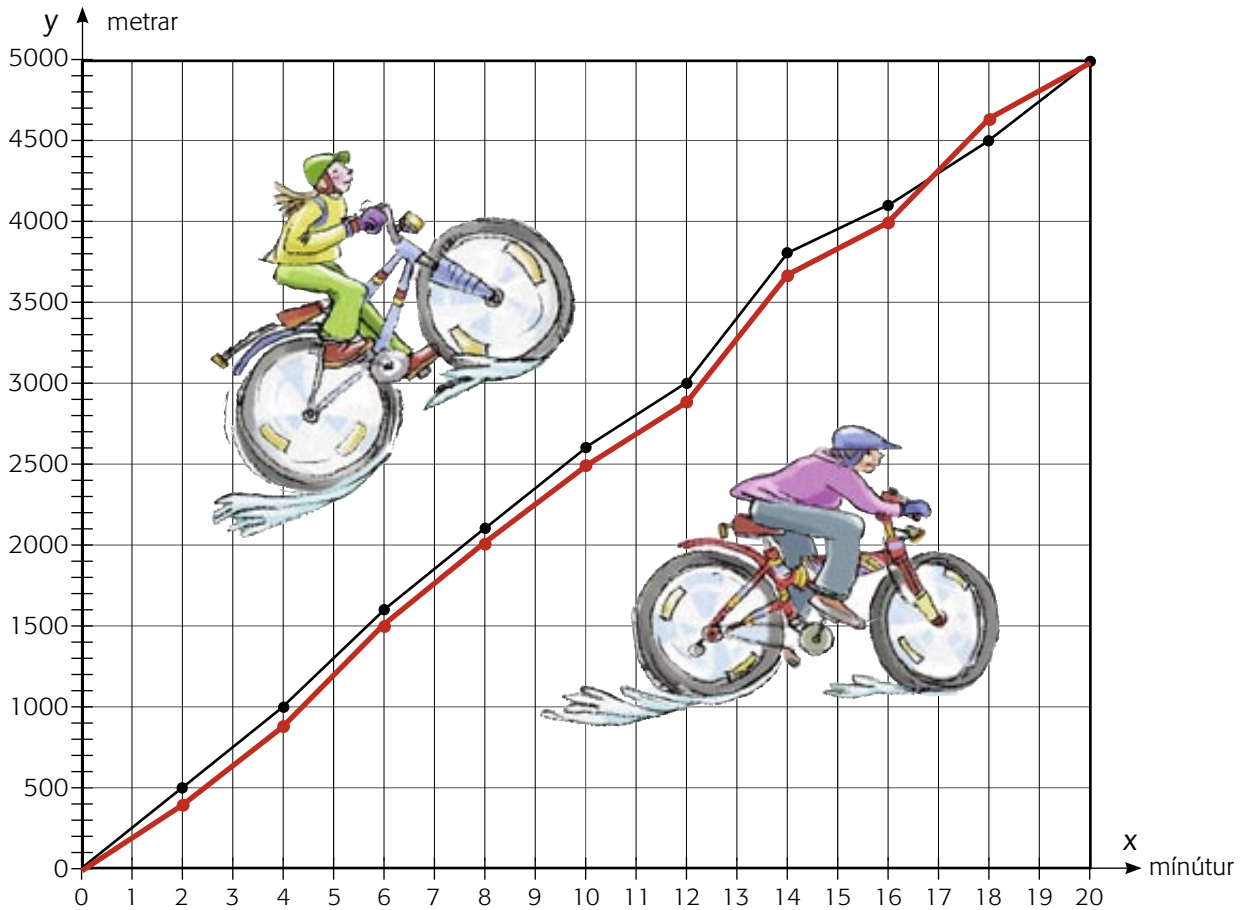
d 2½ mínúta

c 4½ mínúta

e ⅓ úr mínútu

Bls. 72
17 a

	mín	0	2	4	6	8	10	12	14	16	18	20
Arnar	m	0	400	900	1500	2000	2500	2900	3700	4000	4700	5000
Birna	m	0	500	1000	1600	2100	2600	3000	3800	4100	4500	5000



18 a 5000 m

b Arnar

c Birna

d Birna

Bls. 73

- 20 a** 55 mínútur
- b** 500 m
- c** 25 mínútur
- d** 1500 m
- e** 3000 m
- f** Þegar þeir fóru niður brekkuna.

Talnaleikni

Bls. 74

1

$10 + 1 = \underline{1} \cdot 11$ $70 + \underline{7} = 7 \cdot 11$

$20 + \underline{2} = 2 \cdot 11$ $\underline{80} + 8 = 8 \cdot 11$

$\underline{30} + 3 = 3 \cdot 11$ $90 + 9 = 9 \cdot \underline{11}$

$40 + 4 = 4 \cdot \underline{11}$ $100 + 10 = 10 \cdot \underline{11}$

$\underline{50} + 5 = 5 \cdot 11$ $110 + \underline{11} = 11 \cdot 11$

$60 + 6 = \underline{6} \cdot 11$ $\underline{120} + 12 = 12 \cdot 11$

- 2 **a** 108, 96, 84, 72, 60, 48, 36, 24, 12, 0 **b** 10 sinnum

- 3 13, 26, 39, 52, 65, 78, 91, 104, 117, 130

Bls. 75

- 4 Jákvæð tala verður neikvæð, neikvæð tala verður jákvæð.
Dæmi: 8 verður -8 og -8 verður 8.

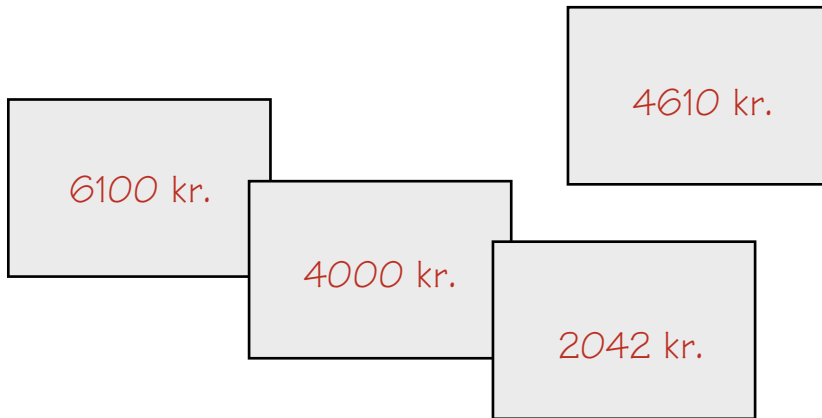
- 5 **a** heil **b** beli

- 6 $8345 - 4729 + 1200 - 8735 - 1150 = 5731$
Hún á þá 5731 krónur eftir og getur keypt íþróttaskóna.

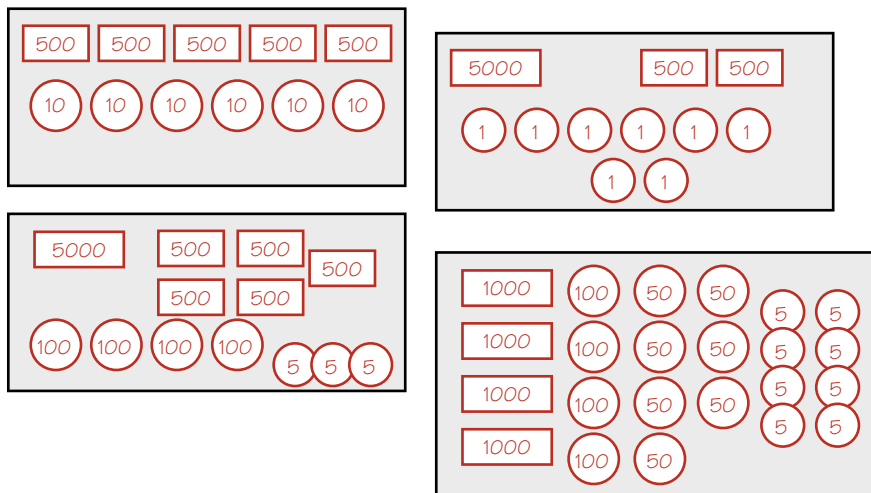
- 7 $12 \cdot 600 = 7200$ $25\,000 - 7200 = 17\,800$
 $250 \cdot 5 = 1250$ á viku
10 vikur 12500
14 vikur 17500 Það tekur 15 vikur.

- 8 **a** 5698
b Hann skuldaði 13500 í upphafi en núna á hann 5698 kr.
c Breytileg svör.

Bls. 76
9



10



- 11 a** 7440
b 3920
c 2085
d 5210

- e** 2440
f 210
g 1480
h 3170

Bls. 77
12



Svör miðast við árið 2010.
Breytileg svör eftir árum.

Bls. 78

13 a 110, 140, 170, 200
30 bætast við

b 1100, 1400, 17000, 20000, 23000
300 bætast við

c 11000, 14000, 17000, 20000, 23000
3000 bætast við

14 a 2600, 2700, 2800, 2900, 3000

b 2340, 2350, 2360, 2370, 2380

15 a 7540, 7550, 7560, 7570, 7580, 7590, 7600, 7610

b 7540, 7541, 7542, 7543, 7544, 7545, 7546, 7547

c 8698, 8598, 8498, 8398, 8298, 8198, 8098, 7998

d 3642, 3542, 3442, 3342, 3242, 3142, 3042, 2942

e 5218, 5118, 5018, 4918, 4818, 4718, 4618, 4518

16 3024, 3124, 3224, 3324, 3424, 3524, 3624, 3724, 3824, 3924

17 5706, 5716, 5726, 5736, 5746, 5756, 5766, 5786, 5796

18 9999

Bls. 79

19

1	2	3	4	5	6	7	8	9
10	20	30	40	50	60	70	80	90
100	200	300	400	500	600	700	800	900
1000	2000	3000	4000	5000	6000	7000	8000	9000
10000	20000	30000	40000	50000	60000	70000	80000	90000

20 a $10\,000 + 4\,000 + 700 + 9$

b $5\,000 + 2\,000 + 300 + 5$

c $70\,000 + 500$

d $70\,000 + 1\,000 + 1$

e $30\,000 + 40 + 7$

f $90\,000 + 8\,000 + 80$

g $6\,000 + 900 + 60$

h $80\,000 + 4\,000 + 100 + 6$

21 Sláðu töluna 12 345 inn í vasareikni.

Hvaða aðgerð og tölu þarftu að slá inn til að fá 2345? -10 000

Hvað þarf að slá inn í vasareikninn til að breyta tölunni 2345

í glugga vasareiknisins í 345? -2000

Hvernig má breyta 345 í 45? -300

Hvernig má breyta 45 í 5? -40

Hvernig má breyta 5 í 0? -5

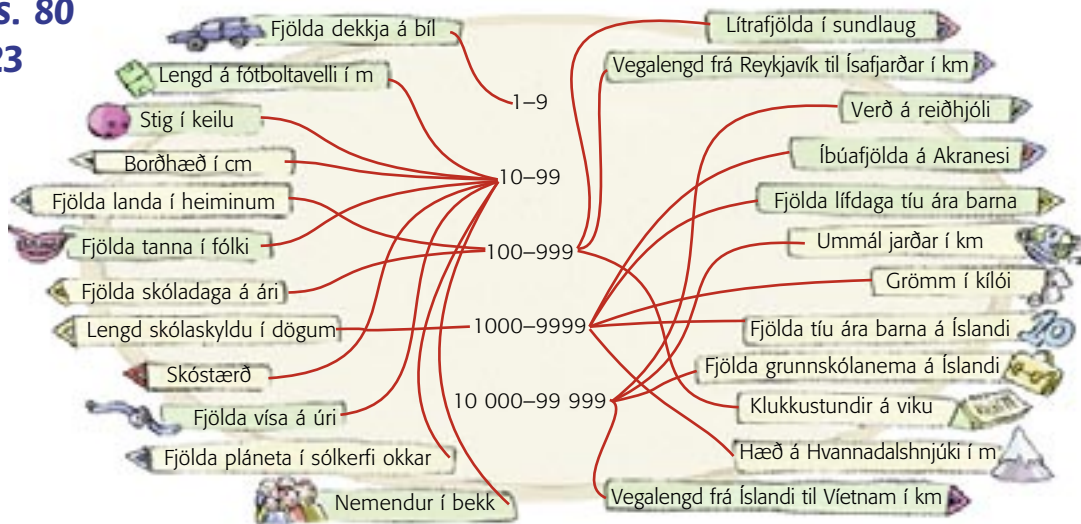
22 a $-56\,000$

b $-10\,000$

c -688

Bls. 80

23



23 a Breytileg svör.

b Breytileg svör.

Bls. 81

25 a 10 000

c 25 000

e 4999

b 70 000

d 75 000

f 84 999

26 a 1000 70
500 35
535

b 5000 + 700
2500 + 350 = 2850

27 a 1000 70
2000 140
2140

b 5000 + 700
10 000 + 1400 = 11 400

28 a 2000

c 10 000

e 34 000

b 4000

d 30 000

f 44 000

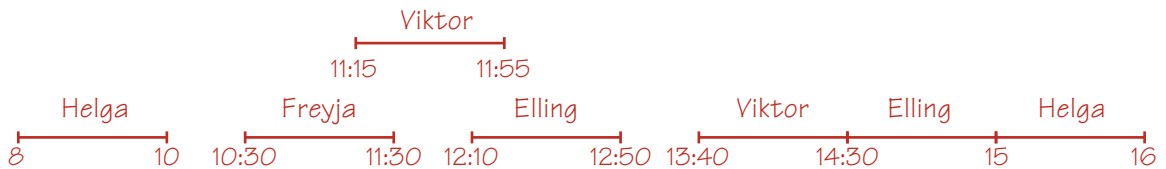
29 200 klukkustundir

Jól í skóla

Bls. 82

- 1 Breytileg svör.
- 2 Ræðst af því hvaða dagur er.
Breytileg svör.

3



Enginn við frá	10–10:30	30 mínútur
	11:55–12:10	15 mínútur
	12:50–13:40	<u>50 mínútur</u>
Þetta gengur ekki upp.		95 mínútur

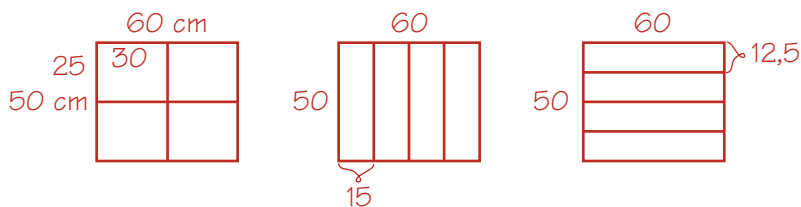
95 mínútur

Já, því það er einhver við í 385 mínútur af 480.

Bls. 83

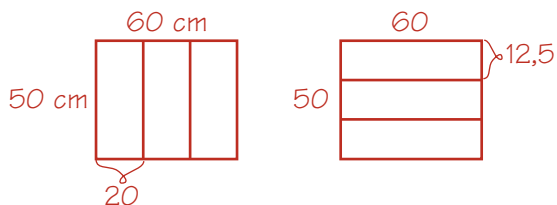
- 4 **a** 70 skurðir.
- b** Þetta eru 80 lengjur. Það þarf 2 lengjur í hvern.
Hægt er að búa til 40 músastiga.
- 5 **a** Nemendur eru 20 $4 \cdot 5 = 20$
Það þarf 5 renninga.
- b** Efnið er 180 cm á breidd.
180 skipt í tvennt er 90 og 90 cm er síðan skipt í tvennt.
Hver nemandi fær því 45 cm.
- 6 15 arkir í fernt. Þá fást $4 \cdot 15$ kort.
 $4 \cdot 15 = 4 \cdot 10 + 4 \cdot 5 = 60$
Nemendur eru 20 og $20 \cdot 3 = 60$. Það eru þrjú kort á mann.

7 a



Hver bútur er 750 fersentimetrar.

b



Hver bútur er 120 fersentimetrar.

Bls. 84

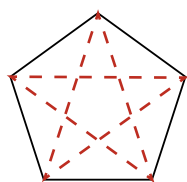
8

	heiti	fjöldi horna	hvöss horn, rétt horn, gleið horn (h) < (r) L (g) L
	þríhyrningur	3	3 hvöss horn
	ferningur	4	4 rétt horn
	fimmhyrningur	5	5 gleið horn
	sexhyrningur	6	6 gleið horn

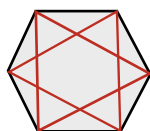
9 a

b

stjörnu



10



11



12

Mynd af fimmhyrningi, sexhyrningi og átthyrningi þar sem hliðar hafa verið framlengdar og búnar til stjörnur.

Bls. 85

13 a 6 armar

b Sexhyrningur

14

15 Ferningur

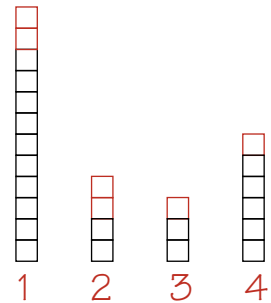
Já

Ath. Villa í 4. útgáfu 2010
5 kubbar eiga að vera 6 kubbar.

Bls. 87

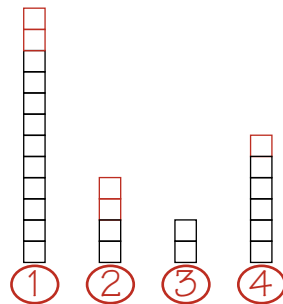
17 a Notaðu 24 kubba og raðaðu þeim í fjóra turna.

- Það eru 8 fleiri kubbar í turni eitt en í turni tvö.
- Í turni fjögur eru 5 kubbar sem er helmingur af fjölda kubba í turni eitt.
- Samanlagður fjöldi kubba í turni tvö og þrjú er sá sami og fjöldi kubba í turni fjögur.



b $\frac{1}{6}$ er 4

Meðaltal er $\frac{24}{3} = 8$



18

Land	Víetnam	Kanada	Malaví	Brasilía
Tími	30. nóv.	30. nóv.	25. nóv.	3. des.
Litur	silfrað	rautt	grænt	gyllt
Mynd	jólatré	jólapoki	jólakrans	jólasveinn

Bls. 88
19

