

Skygni 6

**Svarlisti –
næmingabókin**

1 Stór töl

- 101 a 4 langommur og 4 langabbar
b 8 oldurommur og 8 oldurabbar
c 16 tippoldurommur og 16 tippoldurabbar
d 32 tipptippoldurommur og 32 tipptippoldurabbar
- 102 7. ættarlið
- 103 a 1024 b $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$
- 104 a 4096 b $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2$
- 105 500 ár \approx 20 ættarlið. $2^{20} = 1\,048\,576$
- 106 a 15 625 b 6 561 c 16 807
d 6 561 e 729 f 279 936
g 3 125 h 32 768 i 512
- 107 a 6 642 b 808 c 1 354
d 2 024 e 2 058 f 3 680
g 5 904 h 7 876 i 513
- 108 Pluto, Mánin, Merkur, Mars, Venus, Jörðin, Neptun, Uranus, Saturn, Jupiter, Sólin
- 109 $y = 7$ $7^6 = 117\,149$
- 110 $x = 5$ $8^5 = 32\,768$
- 111 $a = 9$ $9^5 = 59\,049$
- 112 $x = 6$ $12^5 = 248\,832$ $12^6 = 2\,985\,984$
- 113 12,5 mia = 12 500 000 000 45 mió = 45 000 000
- 114 5 trillíónir = 5 000 000 000 000 000
- 115 8,5 billíónir = 8 500 000 000 000
- 116 a 10^7 b 10^6 c 10^3 d 10^{10}
e 10^3 f 10^6 g 10^4 h 10^7
i Vit leggja stigvísararnar saman j Vit draga seinna stigvísan frá tí fyrra stigvísanum
- 117 a 460 b 4 750 c 60 000
d 1 060 000 e 6 500 f 260
g 80 750 h 46 600 000 i 758 000 000
- 118 a $3,6 \cdot 10^7$ b $4,34 \cdot 10^7$ c $5,51 \cdot 10^6$ d $4 \cdot 10^2$ e $1,6 \cdot 10^3$ f $7 \cdot 10^2$
- 119 a -29 b -8 c 13 d 27 e 3
f -22 g -27 h 6 i -41 j -16
- 120 a 15 minuttir b 30 minuttir
c 45 minuttir d 60 minuttir = 1 tími

121 a $\frac{6}{5} = 1 + \frac{1}{5}$ b $\frac{4}{3} = 1 + \frac{1}{3}$ c $\frac{6}{6} = 1$ d $\frac{3}{7}$
e $\frac{1}{4}$ f $\frac{10}{8} = 1 + \frac{1}{4}$ g $\frac{11}{10} = 1 + \frac{1}{10}$ h $\frac{4}{8} = \frac{1}{2}$

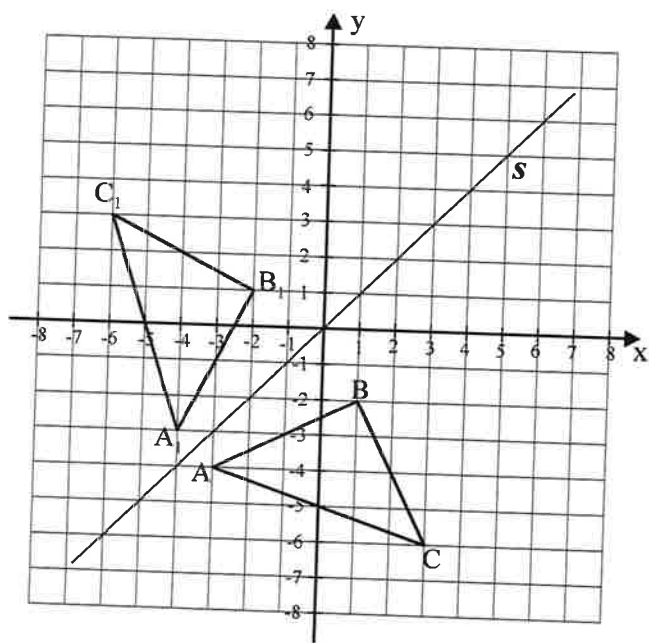
122 a 54,6 cm b Óendaliga nógvar loysnir

123 a $x = 7$ b $x = 8$ c $x = 7$ d $x = 7$

124 a 235 b 107 c 56 d 69

125 Útreiðslur: 3115 kr Inntøkur: 2955 kr Undirskot: 160 kr

126 a og b



c $A_1 = (-4, -3)$
 $B_1 = (-2, 1)$
 $C_1 = (-6, 3)$

127 a $U = 18 \text{ cm}$ b $V = 18 \text{ cm}^2$ c ---
d 3 ferðir e 9 ferðir

128 a 76,8 b 58,5 c 63 d 8,4 e 54,4 f 11

129 a 45 b 36 c 60 d 30 e 90 f 15

130 $\frac{1}{12} \frac{1}{6} \frac{1}{5} \frac{1}{4} \frac{1}{3} \frac{1}{2}$

131 a 1327,50 kr b 7 522,50 kr

132 $V = 67,5 \text{ cm}^2$

133 a 227,2 b 86,8 c 10,4 d 58 e 75,6
f 117 g 100 h 33 i 237 j 37

134 a 56 b 49 c 157 d 14,9 e 56,7 f 4,25

135 a $x = 9$ b $x = 4$ c $x = 3$ d $x = 7$ e $x = 5$ f $x = 2$

136 a $8,5 \cdot 10^3$ b $4,6 \cdot 10^6$ c $9,62 \cdot 10^4$ d $3,0 \cdot 10^6$
e $1,2 \cdot 10^5$ f $4,5 \cdot 10^4$ g $7,2 \cdot 10^{10}$ h $9,6 \cdot 10^8$

- 137 a $200 \text{ cm} = 2 \text{ m}$ b $9\,760 \text{ cm} = 97,6 \text{ m}$
 c $27\,500 \text{ mm} = 27,5 \text{ m}$ d $1\,342\,000 \text{ mm} = 1342 \text{ m} \approx 1,3 \text{ km}$
- 138 a $6,2 \cdot 10^6$ b $8,0 \cdot 10^8$ c $6,5 \cdot 10^6$ d $5,25 \cdot 10^9$
- 139 a $2,45 \cdot 10^6$ b $1,7 \cdot 10^6$ c $5,46 \cdot 10^6$ d $5,0 \cdot 10^4$ e $2,35 \cdot 10^7$ f $1,5 \cdot 10^8$
- 140 a $\approx 16\,667 \text{ min}$ b $\approx 278 \text{ tímar}$
 c $\approx 11,6 \text{ samdægur}$ d $\approx 11\,574 \text{ samdægur} \approx 31,7 \text{ ár}$
- 141 a $68\,250 \text{ fólk}$ b $8,0 \cdot 10^9$
 c $8,0 \cdot 10^8 \text{ m}^2$ d $8,0 \cdot 10^2 \text{ km}^2$
- 142 a $9,04 \cdot 10^4$ b $3,4 \cdot 10^4$ c $2,6 \cdot 10^4$
 d $5,0 \cdot 10^6$ e $5,0 \cdot 10^6$ f $8,85 \cdot 10^5$
- 143 Stærri ($\approx 4,8 \cdot 10^8$)
- 144 a $1,28 \cdot 10^8 \text{ l}$ b $7,68 \cdot 10^9 \text{ l}$
- 145 a $3,6 \cdot 10^9 \text{ tons}$ b $3,6 \cdot 10^{12} \text{ kg}$
- 146 a $2,2 \cdot 10^8 \text{ kyknur}$ b $5,0 \cdot 10^6 \text{ kyknur}$
- 147 a $3,9 \cdot 10^9 \text{ flísar}$ b $1,2 \cdot 10^{11} \text{ kr}$ c $2,4 \cdot 10^6 \text{ kr}$
- 148 $2,875 \text{ tons}$
- 149 $\approx 23 \text{ steinar}$
- 150 20 km
- 151 $\approx 118\,000 \text{ kg}$

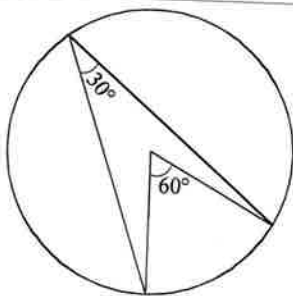
2 Tema – Spøl

- 201 a $\frac{1}{6}$ b $\frac{3}{6} = \frac{1}{2}$ c $\frac{2}{6} = \frac{1}{3}$
- 202 a $\frac{6}{12} = \frac{1}{2}$ b $\frac{4}{12} = \frac{1}{3}$ c $\frac{4}{12} = \frac{1}{3}$ d $\frac{2}{12} = \frac{1}{6}$ e $\frac{10}{12} = \frac{5}{6}$ f $\frac{3}{12} = \frac{1}{4}$
- 203 a $\frac{10}{20} = \frac{1}{2}$ b $\frac{6}{20} = \frac{3}{10}$ c $\frac{4}{20} = \frac{1}{5}$ d $\frac{4}{20} = \frac{1}{5}$ e $\frac{18}{20} = \frac{9}{10}$ f $\frac{5}{20} = \frac{1}{4}$
- 204 a $\frac{7}{20}$ b $\frac{9}{20}$ c $\frac{14}{20} = \frac{7}{10}$ d $\frac{5}{20} = \frac{1}{4}$
e $\frac{1}{20}$ f $\frac{2}{20} = \frac{1}{10}$ g $\frac{3}{20}$ h 0
- 205 a $\frac{13}{52} = \frac{1}{4}$ b $\frac{26}{52} = \frac{1}{2}$ c $\frac{6}{52} = \frac{3}{26}$ d $\frac{4}{52} = \frac{1}{13}$ e $\frac{2}{52} = \frac{1}{26}$
- 206 a $\frac{12}{52} = \frac{3}{13}$ b $\frac{2}{52} = \frac{1}{26}$ c $\frac{4}{52} = \frac{1}{13}$ d $\frac{8}{52} = \frac{2}{13}$ e $\frac{1}{52}$ f $\frac{13}{52} = \frac{1}{4}$

3 Geometri

- 301 a $B_1 = (3, -2)$ $C_1 = (3, -5)$ $D_1 = (-3, -6)$
b $A_2 = (-1, 10)$ $B_2 = (-7, 9)$ $C_2 = (-7, 6)$ $D_2 = (-1, 5)$
- 302 a $F_1 = (3, -11)$ $G_1 = (-1, -11)$
b $E_2 = (2, -4)$ $F_2 = (6, 2)$ $G_2 = (2, 2)$
- 303 $I_1 = (-5, 1)$ $J_1 = (-2, 1)$ $K_1 = (0, 3)$ $L_1 = (0, -2)$
- 304 $N_1 = (-1, 4)$ $O_1 = (-5, 4)$ $P_1 = (-5, 8)$
- 305 $E_1 = (2, -2)$ $F_1 = (-2, 4)$
- 306 ---
- 307 ---
- 308 a --- b --- c $A_1 = (9, 7)$
- 309 a --- b --- c $B_1 = (9, -1)$
- 310 a --- b --- c 270° ímóti urinum um O.
- 311 a 270° við urinum. b 180° við urinum.
- 312 a (a, b) fer í $(-b, a)$. Fyrri krosstal verður seinna krosstal og seinna krosstal verður fyrri krosstal, men broytir fortekn.
b (a, b) fer í $(-a, -b)$. Bæði krosstölunir broyta fortekn.
c 180° við urinum um $(0, 0)$ ella 180° ímóti urinum um $(0, 0)$.
- 313 a --- b --- c $B_1 = (-8, 8)$ og $C_1 = (-4, 8)$ d Nei
- 314 90°
- 315 72°
- 316 10 deildir
- 317 a 4 deildir b $\frac{1}{5}$

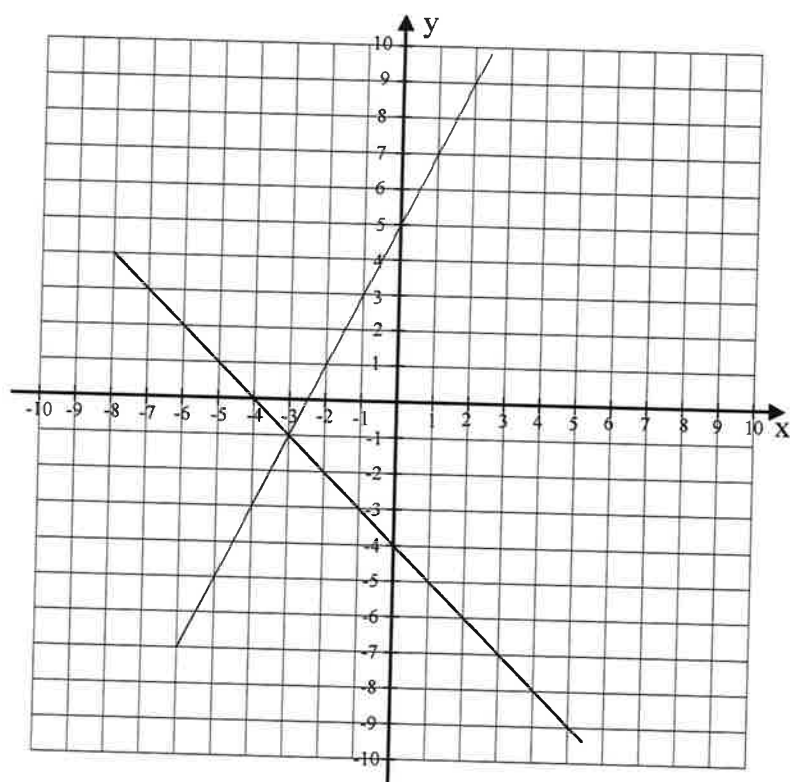
- 318 a ---
b ---
c ---
d 30°



- 319 a $\angle BAC \approx 63^\circ$ b $\angle BDC \approx 63^\circ$
c $\angle BEC \approx 63^\circ$ d Umfarsvinklar
- 320 a --- b $\approx 63^\circ$

- 321 a --- b $\approx 127^\circ$
 c Ein umfarsvinkul er helvtina av einum miðvikli, tá ið teir fevna um sama boga.
- 322 a --- b --- c Miðvinkul: $\approx 74^\circ$
 d --- e Umfarsvinkul: $\approx 37^\circ$
 f Umfarsvinkulin er helvtina av miðvinklinum.
- 323 $\angle v = 30^\circ$
- 324 $\angle x = 120^\circ$
- 325 a $\angle AOB = 180^\circ$ b $\angle ACB = 90^\circ$
- 326 a $\pi \approx 3,1$ b $\pi \approx 3,14$
- 327 Í øllum trimum sirkulnum: $\approx 3,14$
- 328 a Vit falda tvørmátið við π b Vit falda fyrst radius við 2, og so falda vit við π
- 329 $\pi \approx 3,14$ $\frac{72}{\pi} \approx 22,9$ cm
- 330 $\pi \approx 3,14$ $U \approx 219,8$ m
- 331 a $x = 8$ b $x = 4$ c $x = 8$ d $x = 15$ e $x = 6$ f $x = 10$

- 332 a Skurðpunkt:
 $(-3, -1)$
 b Nei



- 333 a $\frac{3}{5}$ b $5 + \frac{1}{2}$ c $7 + \frac{1}{3}$
 d $3 + \frac{1}{4}$ e $6 + \frac{1}{6}$ f $3 + \frac{1}{2}$
- 334 a 288 b 112 c 51 d 8 e 60 f 525

335 a 157 b 84 c 214 d 159 e 2971 f 381

336 a $67 \text{ mia} + 110 \text{ mia} = 177 \text{ mia} = 1,77 \cdot 10^{11} \text{ dósir}$
b $1,77 \cdot 10^{11} \cdot 0,015 = 2655 \text{ mio kg} = 2\,655\,000 \text{ tons}$
c $(2,655 \cdot 10^9) : 0,013 \approx 2,04 \cdot 10^{11} \text{ dósir} \approx 200 \text{ mia dósir}$

337 $10 : 0,08 = 125 \text{ plátur}$

338 a 10 b 297 c 10 d 87 e 640 f 720

339 a -17 b 11 c -12 d -36 e -12 f 12

340 25 deildir

341 a 14 b 60 c 57 d 85 e 75 f 64

342 a 1053,4 b 1182,6 c 207,24 d 163,89 e 21,46 f 39

343 a 321 b 130 c 14 d 0,5 e 0,2 f 12,5

344 a 241 b 131 c 544 d 104 e 599 f 100

345 $10^9 \text{ mm} = 10^8 \text{ cm} = 10^6 \text{ m} = 10^3 \text{ km} = 1000 \text{ km}$

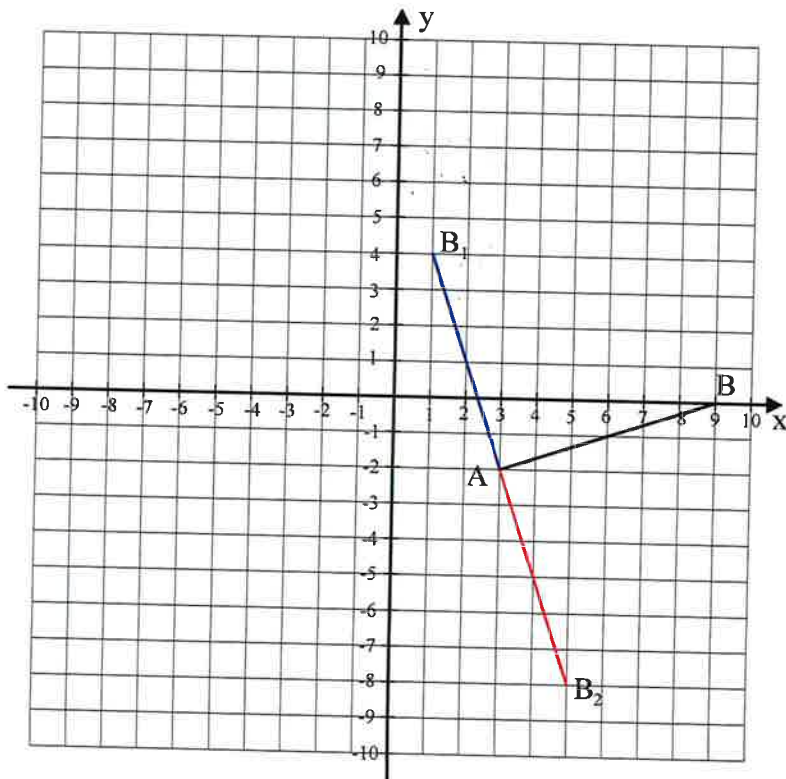
346 a 28 b 7 c 52 d 39 e 67 f 3

347 a 180° b 90° c 60° d 270° e 18.15 f 17.45

348 a $\frac{1}{8}$ b $\frac{1}{6}$ c $\frac{1}{4}$ d $\frac{1}{5}$ e $\frac{1}{2}$ f $\frac{1}{12}$

349 a Umfarsvinkul b $\angle x = 40^\circ$
c Miðvinkul d $\angle y = 70^\circ$

350 a ---
b $B_1 = (1,4)$
c $B_2 = (5,-8)$



351 $\pi = 3,14$ $U = 628 \text{ cm}$

352 a $A_1 = (4,9)$ b $B_1 = (9,9)$ $A_2 = (9,4)$

353 $C_1 = (-3,6)$ $D_1 = (-3,-4)$ $E_1 = (1,-2)$ $F_1 = (1,2)$

354 a $H_1 = (-1,8)$ $I_1 = (2,1)$
b $H_2 = (6,4)$ $I_2 = (9,-3)$

355 a $L_1 = (1,0)$ $M_1 = (-3,0)$ $N_1 = (-3,4)$ $O_1 = (1,4)$
b $L_2 = (1,4)$ $M_2 = (1,8)$ $N_2 = (5,8)$ $O_2 = (5,4)$

356 a --- b $A_1 = (-6,6)$ $B_1 = (-3,6)$
c --- d $A_2 = (-6,-6)$ $B_2 = (-6,-3)$
e 180° við urinum um $(0,0)$ ella 180° ímóti urinum um $(0,0)$.

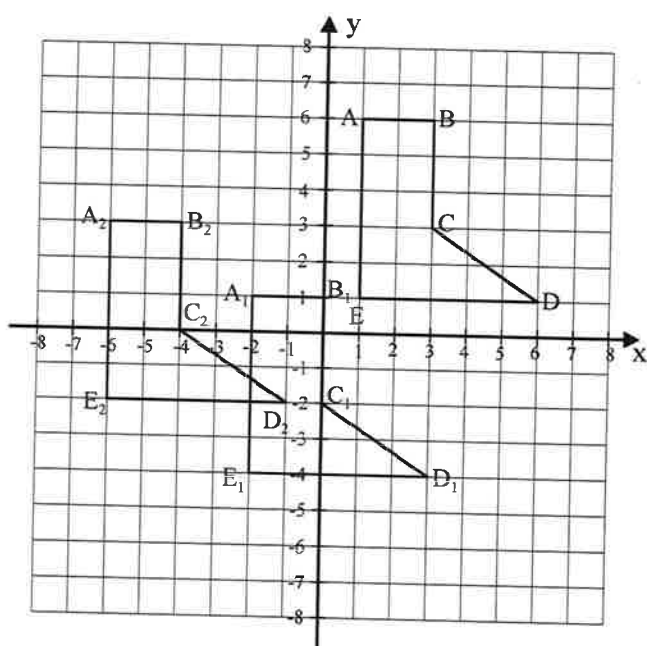
357 90° ímóti urinum um $(1,1)$ ella 270° við urinum um $(1,1)$.

358 a $\frac{1}{9}$ b $\frac{1}{6}$ c $\frac{1}{2}$ d $\frac{1}{3}$ e $\frac{1}{5}$ f $\frac{1}{12}$

359 a --- b Miðdepil: $(2,-2)$ radius: 5 eindir
c $\angle BAD = 90^\circ$ d 180°

360 $\pi \approx 3,14$ $t \approx 400 \text{ mm} = 40 \text{ cm}$

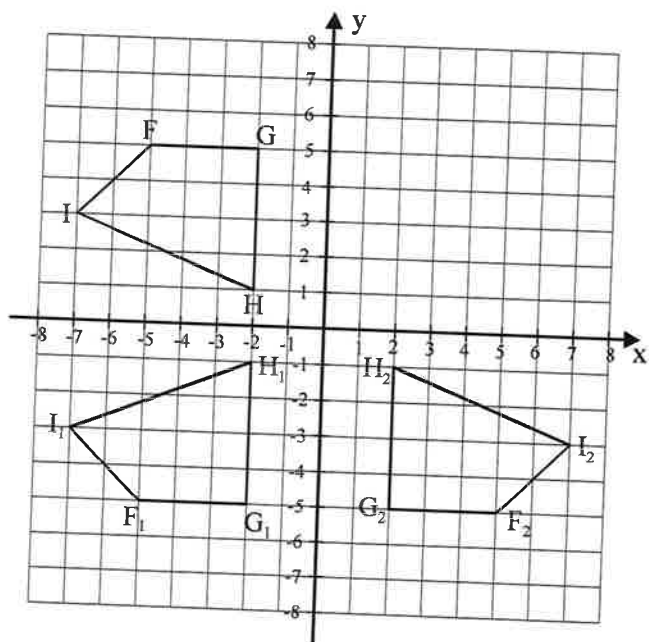
361



a --- b $A_1 = (-2,1)$
 $B_1 = (0,1)$
 $C_1 = (0,-2)$
 $D_1 = (3,-4)$

c --- d $A_2 = (-6,3)$
 $B_2 = (-4,3)$
 $C_2 = (-4,0)$
 $E_2 = (-6,-2)$

362



a --- b $F_1 = (-5, -5)$
 $G_1 = (-2, -5)$
 $H_1 = (-2, -1)$
 $I_1 = (-7, -3)$

c --- d $F_2 = (5, -5)$
 $G_2 = (2, -5)$ $H_2 = (2, -1)$
 $I_2 = (7, -3)$

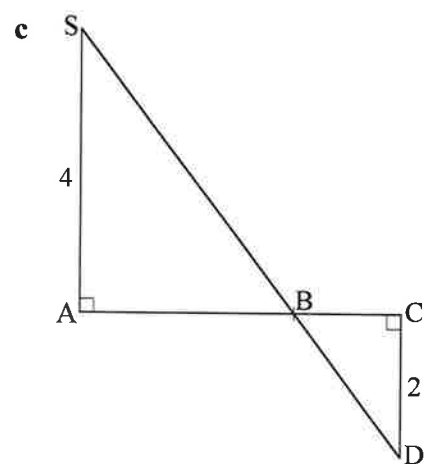
363 a --- b $K_1 = (-6, -1)$ $L_1 = (-6, 4)$
c --- d $K_2 = (-1, 4)$ $L_2 = (4, 4)$
e --- f $K_3 = (4, -1)$ $L_3 = (4, -6)$

364 a --- b $M_1 = (4, 5)$ $N_1 = (-3, 5)$ $O_1 = (-3, -1)$ $P_1 = (1, -1)$
c --- d $N_2 = (0, 2)$ $O_2 = (0, -4)$ $P_2 = (4, -4)$

4 Thales

- 401 a 90° b Allir vinklarnir verða 90° .
- 402 a $AB \approx 3,4 \text{ cm}$ $BC \approx 2,2 \text{ cm}$
b $A_1B_1 \approx 6,8 \text{ cm}$ $B_1C_1 \approx 4,5 \text{ cm}$
c $A_2B_2 \approx 10,2 \text{ cm}$ $B_2C_2 \approx 6,7 \text{ cm}$
d Tá ið AC verður tvær ferðir so long, verða hinar síðurnar eisini tvær ferðir so langar.
Tá ið AC verður tríggjar ferðir so long, verða hinar síðurnar eisini tríggjar ferðir so langar.
- 403 a $\angle A \approx 56^\circ$ $\angle B \approx 83^\circ$ $\angle C \approx 41^\circ$
b $\angle A_1 \approx 56^\circ$ $\angle B_1 \approx 83^\circ$ $\angle C_1 \approx 41^\circ$
c $\angle A_2 \approx 56^\circ$ $\angle B_2 \approx 83^\circ$ $\angle C_2 \approx 41^\circ$
d Tá ið allar síðurnar verða líka nógvar ferðir longri, verða vinklarnir óbroyttir.
- 404 a $\angle A \approx 71^\circ$ $\angle B \approx 39^\circ$ $\angle C \approx 71^\circ$
b $\angle A_1 \approx 71^\circ$ $\angle B_1 \approx 39^\circ$ $\angle C_1 \approx 71^\circ$
c $\angle A_2 \approx 71^\circ$ $\angle B_2 \approx 39^\circ$ $\angle C_2 \approx 71^\circ$
d Tá ið allar síðurnar verða líka nógvar ferðir longri, verða vinklarnir óbroyttir.
e Javnbeintar tríkantar.
- 405 a $AB = BC \approx 2,3 \text{ cm}$ b $A_1B_1 = B_1C_1 \approx 4,7 \text{ cm}$ c $A_2B_2 = B_2C_2 \approx 7,0 \text{ cm}$
d Tá ið AC verður tvær ferðir so long, verða hinar síðurnar eisini tvær ferðir so langar.
Tá ið AC verður tríggjar ferðir so long, verða hinar síðurnar eisini tríggjar ferðir so langar.
e Javnbeintar tríkantar.
- 406 a Bakkin er líka høgur, sum skuggin er langur.
b ---
- 407 a Tríkanturin var javnbeintur og rættvinklaður.
b Javnbeintur, rættvinklaður tríkantur.
c --- d h: hæddin á pyramiduni, a: helvtin av síðuni í grundflatanum,
b: longdin á skugganum, T: Thales, c: longdin á skugganum av Thales
e Hæddin = a + b
- 408 a --- b ---

- 409 a Tveir réttvinklaðar, allíkar tríkantar. b Samsvarandi síður.



Teinurin CD er helvtina av AS .

d --- e ---

5 Vidd

- 501 a 6 cm b Radius
c --- d a er umleið helvtin av ummálinum á sirklinum.
- 502 Einum rektangli
- 503 $\approx 1256 \text{ cm}^2$ ($\pi = 3,14$)
- 504 a $\approx 50,24 \text{ cm}^2$ b $\approx 200,96 \text{ cm}^2$ c $\approx 803,84 \text{ cm}^2$
- 505 1600 cm^2 ($\pi = 3,14$)
- 506 $\approx 38,5 \text{ m}^2$ ($\pi = 3,14$)
- 507 Næstan – hon er 1,96 ferðir størri. $(35^2 \cdot \pi) : (25^2 \cdot \pi) = 35^2 : 25^2 = 1,96$
- 508 Nei – 20-krónan er $\approx 1,35$ ferðir størri enn 10-krónan.
- 509 a 72 cm^2 b 36 cm^2 c $46,8 \text{ cm}^2$
- 510 a 12 cm^2 b 12 cm^2 c 6 cm^2 d 4 cm^2
- 511 a $\approx 2,5 \text{ m}^2$ b 15 fólk c $\approx 1,3 \text{ m}^2$ d $15 - 6 = 9$ fólk
- 512 a 216 cm^2 b 64 cm^2 c 120 cm^2 d 25 cm^2
- 513 a 180 cm^2 b 176 cm^2 c 64 cm^2 d 122 cm^2
- 514 a $10,8 \text{ cm}^2$ b $18,8 \text{ cm}^2$ c 64 cm^2 d $74,4 \text{ cm}^2$
- 515 30 deildir
- 516 40 deildir
- 517 39 deildir
- 518 42,5 deildir
- 519 a $389,52 \text{ cm}^2$ b $423,5 \text{ cm}^2$
c 150 cm^2 d $816,4 \text{ cm}^2$
e $287,14 \text{ cm}^2$ f $20,25 \text{ cm}^2$
- 520 a $10,5 \text{ cm}^2$ b $93,6 \text{ cm}^2$ c $46,4 \text{ cm}^2$ d $13,5 \text{ cm}^2$
e 66 cm^2 f $29,05 \text{ cm}^2$ g $239,4 \text{ cm}^2$
- 521 10 ár
- 522 a Ja, rættvinklaður trikantur.
b $A_1 = (12, -10)$ $B_1 = (17, -10)$ $C_1 = (13, -12)$
- 523 a 270 000 b 159 300 c 110 700
- 524 a 420 b 188 c 156 d 248 e 99 f 495
- 525 a 89 b 424 c 2592 d 6345 e 1600 f 12
- 526 a 0,45 b 1,29 c 0,55 d 1,83 e 0,2 f 5,0

- 527 1440 minuttir
- 528 744 tímar
- 529 100,48 cm
- 530 81,64 cm
- 531 5 m/sek
- 532 3427,60 kr
- 533 56,25 kr
- 534 138,75 kr
- 535 a 11 stig b Fríggjadaminn
c Leygardaginn d 2,9 stig
- 536 1 90° 2 45° 3 150° 4 75°
- 537 a 36,675 b 374,94 c 1,0496 d 239,76
e 28,08 f 878,4 g 67,74 h 19
- 538 a 64 cm² b 29,16 cm² c 98,01 cm²
- 539 a 120 cm² b 75 cm² c 149,85 cm²
- 540 a 9 cm² b 18,2 cm² c 20,24 cm²
- 541 a 64 cm² b 80,4 cm² c 54,945 cm²
- 542 a 30 cm² b 719,1 cm² c 1429,68 cm²
- 543 a 66 cm² b 475,8 cm² c 1232,1 cm²
- 544 a 210 cm² b 135 cm²
- 545 a 1384,74 cm² b 314 cm²
- 546 a $\approx 42,2$ cm² b $\approx 127,2$ cm²
- 547 18 deildir
- 548 66,5 deildir
- 549 72 deildir
- 550 49 deildir
- 551 $\frac{1}{4}$
- 552 $V \approx 1589,6$ cm³ ($\pi = 3,14$)
- 553 $\frac{25}{81} \approx 31\%$
- 554 a $\frac{7}{9}$ b $4 \cdot r^2$ c $\frac{7}{9} \cdot 4 \cdot r^2 = 3\frac{1}{9} \cdot r^2 \approx 3,11 \cdot r^2$
d 3,11 ferðir e π

555 **a** $\frac{1}{8}$ **b** $\frac{1}{32}$

556 $V = 2 \cdot r^2$

557 $V = 62,8 \text{ cm}^2$

6 Brøt og prosent

601 a $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8}$ o.s.fr. b $\frac{1}{3} = \frac{2}{6} = \frac{3}{9} = \frac{4}{12}$ o.s.fr.
 c $\frac{1}{4} = \frac{2}{8} = \frac{3}{12} = \frac{4}{16}$ o.s.fr. d $1 = \frac{2}{2} = \frac{3}{3} = \frac{4}{4} = \frac{5}{5}$ o.s.fr.

602 a $\frac{4}{12} = \frac{1}{3}$ b $\frac{4}{8} = \frac{1}{2}$ c $\frac{3}{9} = \frac{1}{3}$

603 a $\frac{2}{8}$ b $\frac{2}{6}$ c $\frac{4}{10}$ d $\frac{4}{6}$ e $\frac{6}{8}$
 f $\frac{6}{14}$ g $\frac{12}{18}$ h $\frac{6}{16}$ i $\frac{10}{12}$

604 a $\frac{5}{20}$ b $\frac{10}{15}$ c $\frac{15}{25}$ d $\frac{5}{30}$ e $\frac{15}{20}$
 f $\frac{20}{35}$ g $\frac{15}{45}$ h $\frac{25}{40}$ i $\frac{5}{10}$

605 a $\frac{12}{24}$ b $\frac{8}{24}$ c $\frac{6}{24}$ d $\frac{12}{24}$ e $\frac{9}{24}$
 f $\frac{10}{24}$ g $\frac{18}{24}$ h $\frac{16}{24}$ i $\frac{21}{24}$

606 a $\frac{3}{6}$ og $\frac{2}{6}$ b $\frac{8}{12}$ og $\frac{3}{12}$ c $\frac{9}{12}$ og $\frac{6}{12}$
 d $\frac{6}{10}$ og $\frac{7}{10}$ e $\frac{9}{21}$ og $\frac{14}{21}$ f $\frac{20}{24}$ og $\frac{9}{24}$

607 a $\frac{3}{6}$ b -- c $\frac{7}{14}$ d $\frac{6}{12}$ e -- f $\frac{5}{10}$

608 a -- b $\frac{10}{15}$ c -- d $\frac{6}{9}$ e $\frac{28}{42}$ f $\frac{18}{27}$

609 a S b S c S d Ó e S
 f Ó g S h S i Ó

610 a $\frac{3}{4}$ b $\frac{5}{8}$ c $\frac{4}{5}$ d $\frac{13}{15}$ e $\frac{6}{8}$
 f $\frac{9}{12}$ g $\frac{4}{8}$ h $\frac{8}{11}$ i $\frac{11}{16}$

611 a $\frac{1}{3}$ b $\frac{3}{5}$ c $\frac{1}{5}$ d $\frac{2}{7}$ e $\frac{2}{3}$ f $\frac{3}{4}$
 g $\frac{1}{5}$ h $\frac{3}{5}$ i $\frac{1}{4}$ j $\frac{1}{3}$ k $\frac{1}{3}$ l $\frac{2}{3}$

612 a $\frac{6}{9} = \frac{2}{3}$ b $\frac{27}{39} = \frac{3}{4}$ c $\frac{16}{24} = \frac{2}{3}$ d $\frac{10}{15} = \frac{2}{3}$

613 a S b Ó c Ó d Ó
 e S f S g S h S

614 a $\frac{4}{6} = \frac{2}{3}$ b $\frac{5}{10} = \frac{1}{2}$ c $\frac{16}{20} = \frac{4}{5}$
 d $\frac{6}{28} = \frac{3}{14}$ e $\frac{10}{15} = \frac{2}{3}$ f $\frac{21}{30} = \frac{7}{10}$

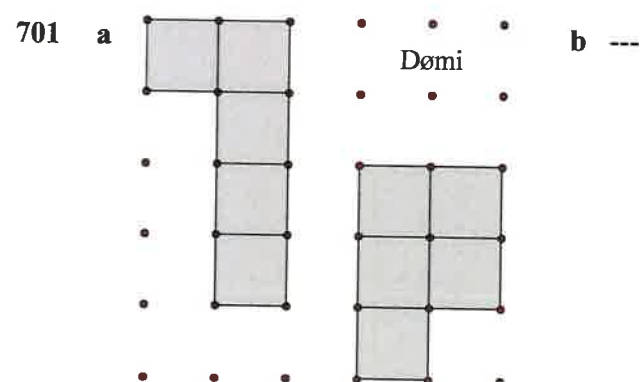
- 615 a $1\frac{2}{5}$ b $2\frac{1}{6}$ c $2\frac{3}{4}$ d $6\frac{2}{3}$ e $4\frac{4}{7}$
 f $5\frac{1}{5}$ g $3\frac{3}{4}$ h $2\frac{3}{8}$ i $4\frac{2}{3}$
- 616 a $\frac{7}{6} = 1\frac{1}{6}$ b $\frac{11}{9} = 1\frac{2}{9}$ c $\frac{15}{10} = 1\frac{1}{2}$
 d $\frac{12}{8} = 1\frac{1}{2}$ e $\frac{9}{4} = 2\frac{1}{4}$ f $\frac{24}{12} = 2$
- 617 a $\frac{7}{12}$ b $\frac{5}{15} = \frac{1}{3}$ c $\frac{6}{20} = \frac{3}{10}$
 d $\frac{2}{8} = \frac{1}{4}$ e $1\frac{6}{10} = 1\frac{3}{5}$ f $1\frac{4}{10} = 1\frac{2}{5}$
- 618 a $\frac{5}{6}$ b $\frac{5}{12}$ c $\frac{14}{15}$ d $\frac{5}{18}$
 e $\frac{7}{8}$ f $\frac{17}{24}$ g $\frac{16}{21}$ h $\frac{17}{30}$
- 619 a $\frac{9}{8} = 1\frac{1}{8}$ b $\frac{25}{18} = 1\frac{7}{18}$ c $\frac{12}{20} = \frac{3}{5}$
 d $\frac{37}{36} = 1\frac{1}{36}$ e $\frac{4}{20} = \frac{1}{5}$ f $\frac{5}{12}$
- 620 a 11 b 25 c 23 d 24 e 62
 f 19 g 41 h 18 i 14
- 621 a 30 b 60 c 90 d 14 e 28
 f 70 g 64 h 27 i 52
- 622 a $1 - \frac{3}{8} = \frac{5}{8}$ b 9 dreingir c 15 gentur
- 623 6 dreingir
- 624 9 gentur
- 625 6 næmingar
- 626 a 3 næmingar b $\frac{3}{24} = \frac{1}{8}$
- 627 a 80 appilsinir 90 súrepli
 40 perur 30 blommur
 b $\frac{30}{240} = \frac{1}{8}$
- 628 a $1 - \frac{3}{10} = \frac{7}{10}$ b 792 kr c 1848 kr
- 629 12 2-litur fløskur 24 1-litur fløskur
 48 $\frac{1}{2}$ -litur fløskur 32 $\frac{3}{4}$ -litur fløskur
 Fleiri möguleikar við blandaðum stöddum.
- 630 $\frac{1}{4} = 0,25 = 25\%$ $\frac{1}{2} = 0,50 = 50\%$
 $\frac{3}{4} = 0,75 = 75\%$ $1 = 100\%$ $\frac{5}{4} = 1,25 = 125\%$

- 631 a 0,15 b 1,75 c 0,4 d 0,6 e 0,2 f 1,05
- 632 a $\frac{10}{100} = 10\%$ b $\frac{40}{100} = 40\%$ c $\frac{16}{100} = 16\%$
d $\frac{15}{100} = 15\%$ e $\frac{34}{100} = 34\%$ f $\frac{75}{100} = 75\%$
- 633 a 15% b 175% c 40% d 60% e 20% f 105%
- 634 a $\frac{45}{100} = 45\%$ b $\frac{70}{100} = 70\%$ c $\frac{175}{100} = 175\%$
d $\frac{180}{100} = 180\%$ e $\frac{37}{100} = 37\%$ f $\frac{225}{100} = 225\%$
- 635 a $\frac{10}{100} = 0,10 = 10\%$ b $\frac{80}{100} = 0,80 = 80\%$ c $\frac{60}{100} = 0,60 = 60\%$
d $\frac{30}{100} = 0,30 = 30\%$ e $\frac{60}{100} = 0,60 = 60\%$ f $\frac{20}{100} = 0,20 = 20\%$
- 636 a 0,28 b 0,08 c 1,15 d 2,50 e 0,85 f 1,05
- 637 a 1,20 = 120% b 1,20 = 120% c 1,80 = 180%
d 1,50 = 150% e 3,60 = 360% f 2,50 = 250%
- 638 a $\approx 0,33 = 33\%$ b $\approx 0,43 = 43\%$ c $\approx 0,17 = 17\%$
d $\approx 0,67 = 67\%$ e $\approx 0,11 = 11\%$ f $\approx 0,86 = 86\%$
- 639 a $\approx 0,667 = 66,7\%$ b $\approx 0,286 = 28,6\%$ c $\approx 0,067 = 6,7\%$
d $\approx 3,333 = 333,3\%$ e $\approx 0,556 = 55,6\%$ f $\approx 1,429 = 142,9\%$
- 640 a 36 m b 416 kg c 60 l d 448 m e 45 kr f 4,50 kr
- 641 a 37,5 m b 525 kg c 37,5 l d 450 m e 108 kr f 2,50 kr
- 642 a Fótþóltur 89,40 kr Ketsjari 74,70 kr
Troyggja 56,40 kr Tennisþóltar 38,70 kr
Boksihandskar 53,40 kr Þóltur 29,40 kr
b Fótþóltur 208,60 kr Ketsjari 174,30 kr
Troyggja 131,60 kr Tennisþóltar 90,30 kr
Boksihandskar 124,60 kr Þóltur 68,60 kr
- 643 Fótþóltur 208,60 kr Ketsjari 174,30 kr
Troyggja 131,60 kr Tennisþóltar 90,30 kr
Boksihandskar 124,60 kr Þóltur 68,60 kr
- 644 206,25 kr
- 645 768,60 kr
- 646 a 253,05 kr b 469,95 kr
- 647 a 40 flísar b 20 flísar c 64 flísar
d 100 flísar e 160 flísar f 112 flísar
- 648 a 100% b 75% c 5% d 40% e 150% f 0%
- 649 a 40 flísar b 60 flísar c 100 flísar d 30 flísar e 28 flísar f 42 flísar
- 650 a 55% b 405 kr c 495 kr

- 651 Meiri: $\approx 18,6\%$
- 652 a 199,90 kr b 3798,10 kr
- 653 a 799,60 kr b 4399,60 kr c 601,50 kr
- 654 a 2,451 mia = 2 451 000 000 fólk
b 857,85 mió = 857 850 000 fólk
- 655 a Ja ($\approx 42,1\%$)
b Nei (býarbúgvar í 2025: 4,05 mia, í 1995: 2,451 mia - Vækstur $\approx 65\%$)
- 656 $\approx 7,09\% \approx 7\%$
- 657 a Ja b 49 deildir
- 658 a $5\frac{2}{3}$ b $1\frac{1}{2}$ c $3\frac{1}{7}$ d $\frac{1}{4}$ e $7\frac{3}{5}$ f $2\frac{1}{6}$
- 659 a 165 m b 112,5 kg c 712,5 kr d 1 litur e 3,25 kr f 713 cm
- 660 25 370 mannfólk
- 661 a $x = 3$ b $x = 8$ ella -8
c $x = 8$ d $x = 12$
e $x = 6$ f $x = 15$
- 662 a 350 b 7250 c 2500 d 93 300 000
e 607 500 f 120,5 g 276 h 50
- 663 $\approx 56,67$ kr
- 664 $\Delta ABC: 320 \text{ cm}^2$ $\Delta DEF: 67,5 \text{ cm}^2$ $\Delta GHI: 76,5 \text{ cm}^2$
- 665 a Eitt kvadrat b 80 deildir c Linjan n
- 666 a $\approx 20,5$ b $\approx 28,7$ c $\approx 28,6$ d 50,1 e $\approx 108,5$ f $\approx 613,4$
- 667 a 3,25 b 8,05 c 8,1 d 15,5 e 0,95 f 8,175
- 668 a 81 b 81 c 54 d 122 e 344 f 8
- 669 a $\approx 345,4$ cm b ≈ 4 ferðir (3,67 ferðir) c $\approx 289,5$ pedalumfær
- 670 a $\frac{1}{2} = \frac{6}{12}$ b $\frac{2}{3} = \frac{8}{12}$ c $\frac{3}{4} = \frac{9}{12}$ d $\frac{5}{6} = \frac{10}{12}$
- 671 a $\frac{4}{6} = \frac{2}{3}$ b $\frac{6}{9} = \frac{2}{3}$ c $\frac{4}{12} = \frac{1}{3}$ d $\frac{5}{15} = \frac{1}{3}$
- 672 a $\frac{4}{8} = \frac{1}{2}$ b $\frac{2}{7}$ c $\frac{6}{4} = 1\frac{1}{2}$ d $\frac{3}{9} = \frac{1}{3}$
- 673 a $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$ b $\frac{1}{2} - \frac{1}{6} = \frac{3}{6} - \frac{1}{6} = \frac{2}{6} = \frac{1}{3}$
c $\frac{3}{4} + \frac{2}{3} = \frac{9}{12} + \frac{8}{12} = \frac{17}{12} = 1\frac{5}{12}$ d $\frac{4}{5} - \frac{3}{10} = \frac{8}{10} - \frac{3}{10} = \frac{5}{10} = \frac{1}{2}$
- 674 a $\frac{7}{2} = 3\frac{1}{2}$ b $3\frac{2}{3} = \frac{11}{3}$ c $\frac{11}{4} = 2\frac{3}{4}$ d $4\frac{3}{4} = \frac{19}{4}$

- 675 a 22 b 11 c 25 d 50 e 50 f 8
- 676 a $\frac{1}{3}$ b 30 lærarar c 2 lærarar d 6 lærarar
- 677 a 80% b 36% c 45% d 145% e 70% f 130%
- 678 a $\approx 86\%$ b $\approx 54\%$ c $\approx 186\%$ d $\approx 133\%$ e $\approx 64\%$ f $\approx 157\%$
- 679 a 30 kr b $\approx 15\%$ c Nei (niðursett við $\approx 14,3\%$)
- 680 a Ja – 75% b Nei ($\approx 76,9\%$)
- 681 a 45% b 19 480 503,60 kr
- 682 a 195 kr b 72 cm c 378 kg d 12 g e 43 f 0,3 m
- 683 a Nei ($\approx 26,3\%$) b 0,50 kr c 8,3%
- 684 270 kr
- 685 a $6\frac{2}{3}$ b 3 c $5\frac{3}{4}$ d 15 e 30 f $\frac{7}{12}$
- 686 20 kr
- 687 1000 m
- 688 a $\frac{1}{12}$ b 30°
- 689 Jensia eigur 300 kr, Jens eigur 150 kr, og Jenis eigur 450 kr
- 690 6 dagar
- 691 a 5% b 75% c 125% d 90% e 25% f 75%
- 692 a $\approx 38\%$ b 1648,50 kr
- 693 a 35% b 12,5% c 16% d 15% e 56% f 19%
- 694 $\approx 13,8\%$
- 695 $\approx 58,7\%$
- 696 a 15% b 20% c 65% d 45% e 15% f 95%
- 697 $\approx 67,1\%$
- 698 a $\approx 56,2\%$ b $\approx 18,0\%$ c 1998: ≈ 5650 l 2008: ≈ 8002 l

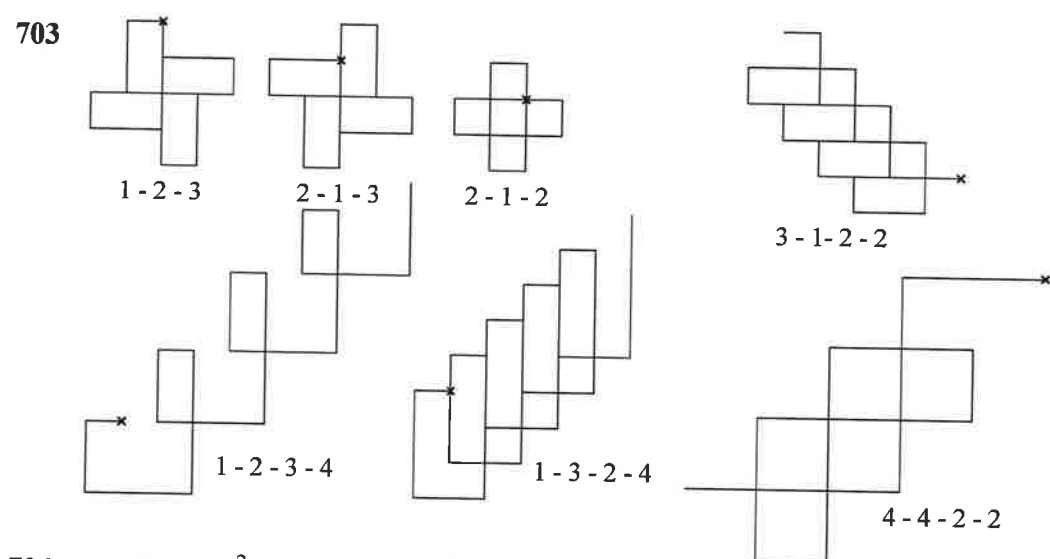
7 Tema – Kanna og sig frá



702 a 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43 og 47

b Dømi:

2	28 = 5 + 23
4 = 2 + 2	30 = 7 + 23
6 = 3 + 3	32 = 3 + 29
8 = 3 + 5	34 = 11 + 23
10 = 3 + 7	36 = 7 + 29
12 = 5 + 7	38 = 7 + 31
14 = 7 + 7	40 = 3 + 37
16 = 3 + 13	42 = 11 + 31
18 = 5 + 13	44 = 3 + 41
20 = 3 + 17	46 = 3 + 43
22 = 11 + 11	48 = 5 + 43
24 = 5 + 19	50 = 3 + 47
26 = 13 + 13	



704 a 623,7 cm²

b ≈ 7,16 cm

705 ---

706 a Ein samskapsás

b Ja

c ---

707 a Ja b --- c ---

708 a 9 x 9 cm (ella 81 cm²) b t x t = t²

8 Linjufunkti3nir

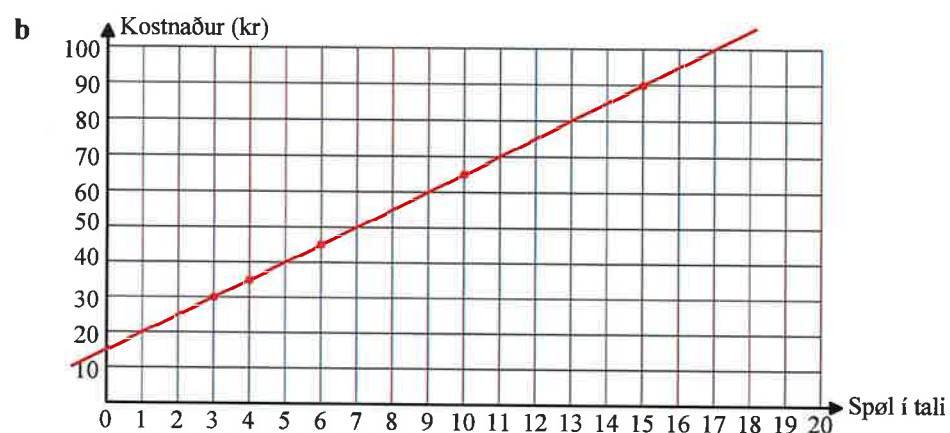
801 a 45 kr b 95 kr c 75 kr

802 a 2 sp3l b 12 sp3l c 16 sp3l

803 10 kr

804 a T.d.

3	4	6	10	15
30	35	45	65	90



805 a 40 kr b 75 kr c 95 kr d 15 kr

806 a 5 sp3l b 17 sp3l c 0 sp3l d 10 sp3l

807 Kostna3dur: $(x, 5x + 10)$

808 a Ja b Nei c Nei

809 a Ja b Nei c Ja

810 Skur3punkt: (3,8)

811 a -24 b 49 c -72 d 72 e 45 f -65

812 a 56 b -96 c 99 d -75 e 20 f -64

813 a -77 b -25 c 24 d -75 e 99 f 99

814 a -1 b 11 c -7 d 23 e 17 f 20

815 a 3 b -3 c -2 d 4 e -4 f 1

816 a (0,3) b Ja

817 a (4,0) b Nei c Ja d Nei

818 a (-1,1) b Nei

819 $y = x - 4$ er forskriftin hj3 l
 $y = -2x + 5$ er forskriftin hj3 m

820 Skurðpunkt: (3,0)

821 Skurðpunkt: (-5,-2)

822 l og m : (4,-1) m og n : (1,-4)

823 $y = \frac{x}{2} - 3$ er forskriftin hjá l

824 $y = \frac{x}{2} - 3$ er forskriftin hjá m

825 $y = x + 5$ er forskriftin hjá l

$y = x - 8$ er forskriftin hjá p

$y = x + 1$ er forskriftin hjá m

$y = x - 2$ er forskriftin hjá n

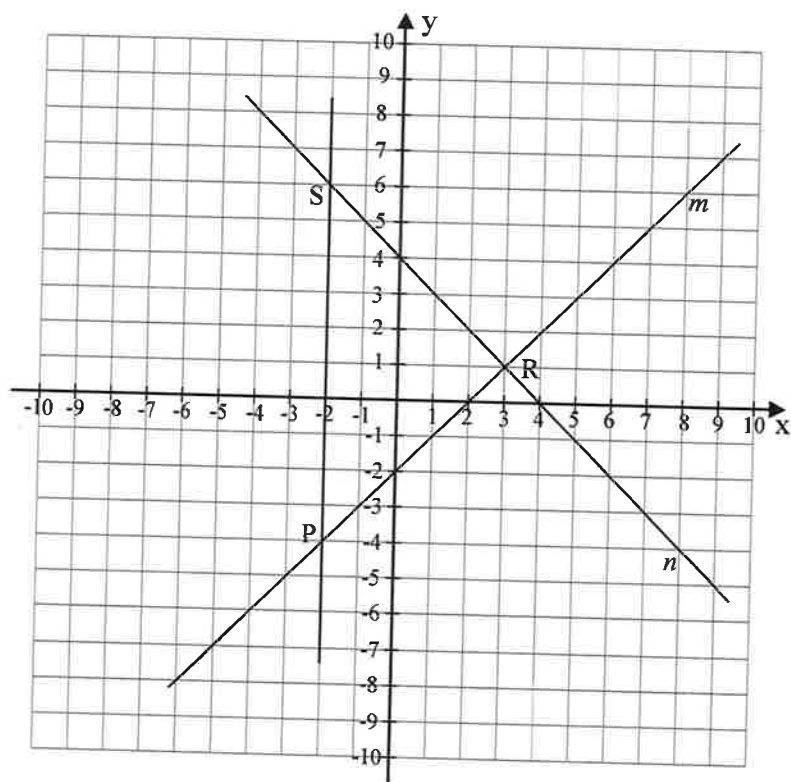
826 a l : (0,3) m : (0,-4) n : (0,1) p : (0,-2)

b $y = ax + b$ b er seinna krosstal, og linjan sker y -ásin í (0,b)

827 l : $y = -x + 5$ n : $y = 2x - 3$ p : $y = x + 3$

828 l : $y = 3x - 6$ m : $y = 2x + 1$ n : $y = -x + 7$

829



a $R = (3,1)$

b (2,0) og (0,-2)

c (4,0) og (0,4)

d $V = 9$ deildir

e ---

f og g $P = (-2,-4)$

í 3.ferhorni

$S = (-2,6)$

í 2.ferhorni

h 25 deildir

830 a $A = (0,6)$ $B = (10,1)$ $C = (0,-4)$

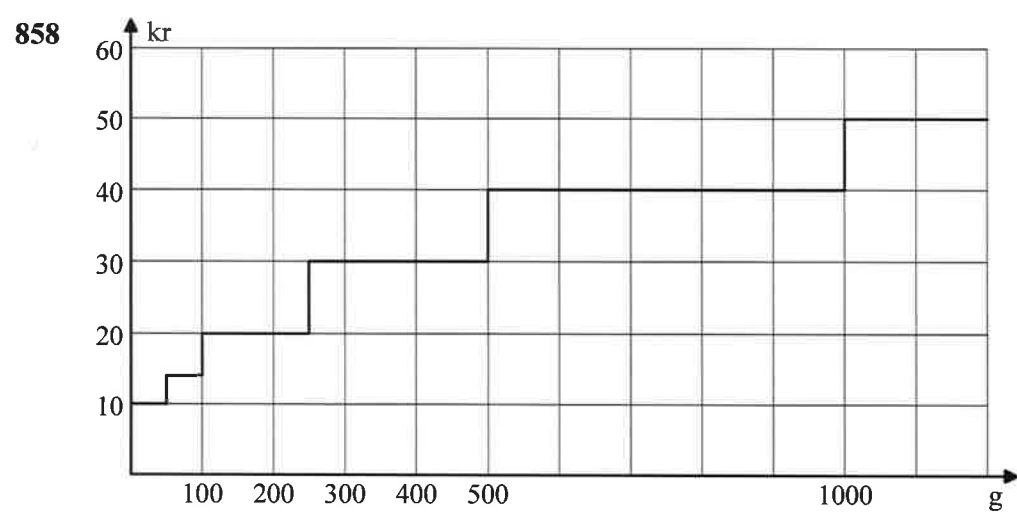
b $V_{ABC} = 50$ deildir

831 a 27 deildir b 18 deildir c 9 deildir

832 24 deildir

833 a 27 cm b 13,5 cm c 60 cm d 1000 cm e 6 cm f 20 cm

- 834 a 400 b 65 c 40 350 d 1 090 000 e 6 f 3 055 000
- 835 a 60 b -66 c 260 d -60 e 144 f -220
- 836 a 294 b 775 c 9,6 d 25,6 e 24,3 f 49,2
- 837 a 4,07 tímar b 43,5 km/t
- 838 a -64 b 81 c 1000 d 14 641 e 512 f 196
- 839 a $\frac{7}{8}$ b 12,5%
- 840 1. skap: 112 m^2 2. skap: 100 m^2
- 841 a Kvadratið er stórr.
b Ja, víddin á rektanglinum verður alltið 1 minni.
c Ja, víddin á rektanglinum verður alltið 4 minni.
- 842 $6^3 = 216$ og $7^3 = 343$
- 843 a --- b Skurðpunkt: (2,3)
- 844 a -6 b -24 c 6 d -3 e 28 f -4
- 845 l: $y = -x + 8$ m: $y = 2x - 8$
- 846 l: $y = -x + 5$ m: $y = x - 8$ n: $y = -2x + 6$
- 847 a 9 b 6 c 0 d 12
e 15 f $7\frac{1}{2}$ g --- h x-ásin: (3,0) y-ásin: (0,9)
- 848 $y = -3x - 6$
- 849 n: $y = -x + 4$ p: $y = 2x - 5$
- 850 $y = -2x + 2$
- 851 a -1 b 8 c 5 d 11 e 14 f $3\frac{1}{2}$
- 852 Báðar ritmyndirnar hóska til forskriftina $y = \frac{1}{2}x - 10$, men eindirnar eru ekki tær somu.
- 853 b = 2
- 854 a 40 km/t b Steðgað verður í 15 minuttir í Hovi. c 60 km/t
d Jú brattari linjan er, jú stórr er ferðin. e $\frac{40 \cdot 60}{70} \approx 34,3 \text{ km/t}$
- 855 a 3 b 2 c 0 d -1 e 1 f -4
- 856 a Tað sigur, hvar linjan sker y-ásin.
b Er talið stórr enn null, hellir linjan uppeftir.
Er talið minni enn null, hellir linjan niðureftir.
Jú stórr talið er, jú brattari er linjan.
- 857 b: $y = -x + 9$



9 Tema – Út at ferðast

- 901 a 130 kr b 234 kr
c $\approx 57,69$ USD d $\approx 105,77$ USD
- 902 a 59,20 kr b 92,50 kr c $\approx 101,35$ SEK d $\approx 54,05$ SEK
- 903 a 87 kr b 130,50 kr c $\approx 206,90$ CZK d $\approx 517,24$ CZK
- 904 a 186 kr b 334,80 kr c $\approx 40,32$ EUR d $\approx 73,92$ EUR
- 905 a 364 kr b 227,50 kr c $\approx 137,36$ PLN d $\approx 27,47$ PLN
- 906 a 103,20 kr b 430 kr c 301 kr d 602 kr
- 907 a 523,50 kr b 785,25 kr c 1587,95 kr d 2966,50 kr
- 908 a 416 kr b 1170 kr c 2522 kr d 6240 kr
- 909 a Troyggja: 32,93 EUR
b Grønt turriklæði: 145,35 NOK
c Blátt turriklæði: 36,46 CHF
- 910 a 6169,50 kr b $\approx 692,38$ kr
- 911 a 4667,60 kr b 1063,92 kr c 535,68 kr
- 912 a 271,25 kr b Ja
- 913 a 613,60 kr b Í Fraklandi
- 914 a $\approx 18,82$ EUR b $\approx 76,92$ PLN
c $\approx 162,79$ NOK d $\approx 40,11$ TRY

10 Töl og bókstavar

- 1001 a $3x + 3y$ b $5x - 5y$ c $9x + 2y$ d $9x - 4y$
e $3x + 3y$ f $-7x + 10y$ g $5x + y$ h $-4x + 12y$
- 1002 a $6x + 6y$ b $3x + 3y$ c $6x + 7y$ d $-5x + 3y$ e $-x + 2y$ f $2x + 3y$
- 1003 a $a - 2b$ b $a + 3b$ c $-2a + b$ d $5b$ e $4a - b$ f $a - 2b$
- 1004 a 19 b 4 c 11 d 23
e 21 f 8 g 21 h 11
- 1005 a $3x + 5y = 17$ b $4x - 3y = 14$ c $-x + 3y = -5$
d $-a + 3b = 8$ e $-3a - b = -33$ f $x + 3y = 14$
- 1006 a 4 $4 \cdot 8 - 4 \cdot x$
- 1007 a Nei b Nei c Ja d Ja e Nei f Ja
- 1008 Tá ið vit falda eitt tal við einum klombri, falda vit allar liðirnar í klombrinum við talinum.
- 1009 a $8x + 28$ b $-18 + 27x$ c $16 + 4x$ d $2x - 6$
e $-30 - 12x$ f $2 + 5x$ g $54 - 42x$ h $-7x - 63$
- 1010 a Ja b Nei c Ja d Ja
e Ja f Nei g Ja h Nei
- 1011 a $-2x - 6$ b $-8x + 12$ c $-12 - 6x$ d $30 - 5x$
e $-8x - 4$ f $-18 + 24x$ g $-2x - 5$ h $-36 + 6x$
- 1012 a $12 + 2x$ b $-3x - 13$ c $6 + 6x$ d $-14 + 9x$
e $10x + 12$ f 6 g $7x + 7$ h $-12x - 3$
- 1013 a $-2 - 3x$ b $3x - 5$ c $-10 + 2x$ d $20 + 4x$
e $3 + 6x$ f $6x - 3$ g $3x + 6$ h $-12 + 2x$
- 1014 a $x + 2$ b $-18 - 19x$ c $4x + 38$ d $4x + 28$
e $4x + 4$ f x g 0 h $25 + x$
- 1015 $a - 4b + 20 = 9$
- 1016 $6a + 6b = 54$
- 1017 a 18 b -20 c 2 d 15 e 60 f 52
- 1018 a 9 b 12 c 9 d 9
e 12 f 10 g -15 h 9 a, c, d og h
- 1019 a $x = 22$ b $x = 18$ c $x = 34$ d $x = 12$ e $x = 23$ f $x = 13$
- 1020 a $x = 7$ b $x = 16$ c $x = 4$ d $x = 12$ e $x = 18$ f $x = 2$
- 1021 a $x = -6$ b $x = -4$ c $x = 20$ d $x = -7$ e $x = 14$ f $x = -12$
- 1022 a $x = 9$ b $x = 7$ c $x = 11$ d $x = 6$ e $x = 4$ f $x = 7$

- 1023 a $x = -1$ b $x = -6$ c $x = -3$ d $x = -3$ e $x = 7$ f $x = 4$
- 1024 a $x = -4$ b $x = 12$ c $x = 2$ d $x = 9$ e $x = 2$ f $x = -28$
- 1025 ---
- 1026 a $x = 8$ b $x = 2$ c $x = 5$ d $x = 10$ e $x = 4$ f $x = -2$
- 1027 a 2460 b 6440 c 45 100 000 d 3020 e 28 820 f 2640
- 1028 28% – og það ger það sama, í hvörjum rað avsláttirnir verða roknaðir.
- 1029 a $400 = 4 \cdot 10^2$ b $120 = 1,2 \cdot 10^2$ c $18\,000 = 1,8 \cdot 10^4$
d $4000 = 4 \cdot 10^3$ e $3000 = 3 \cdot 10^3$ f $4 \cdot 10^0$
- 1030 a $\angle O = 60^\circ$ b $\angle C = 30^\circ$
- 1031 Skurðpunkt: $(-2,4)$
- 1032 $3,4\text{ dm} = 340\text{ mm}$
- 1033 $\pi \approx 3,14$ U = 141,3 cm
- 1034 $\approx 1998\text{ m} \approx 2000\text{ m}$
- 1035 a 3,75 b $\approx 1,33$ c $\approx 1,33$ d $\approx 3,43$ e 9 f 4
- 1036 $\triangle ABC: 27\text{ m}^2$ $\triangle DEF: 24\text{ m}^2$ $\triangle GHI: 56\text{ m}^2$
- 1037 a ≈ 5 b ≈ 13 c ≈ 3 d ≈ 3 e 2 f ≈ 30
- 1038 l hefur forskriftina b m hefur forskriftina c
n hefur forskriftina e p hefur forskriftina f
- 1039 a x b $9x$ c $-3x$ d $7x$ e y f $-4y$
- 1040 a $24x - 12$ b $-24 - 6x$ c $-12 + 4x$ d $2 + 5x$ e $-30 - 10x$ f $-12x + 24$
- 1041 a $17x + 25$ b $x - 6$ c $5x - 15$ d $9x - 2$ e $x + 1$ f $4x + 8$
- 1042 a 22 b 31 c 24 d -7 e 0 f 4
- 1043 a $x + 22 = 25$ b $-9x + 14 = -13$ c $x + 11 = 14$
d $-10x + 10 = -20$ e $12x - 8 = 28$ f -16
- 1044 a -5 b -9 c 14 d -8 e -5 f 6
- 1045 a -54 b 6 c -20 d -12 e -30 f 16
- 1046 a $x = 5$ b $x = -4$ c $x = 3$ d $x = 4$ e $x = 3$ f $x = -3$
- 1047 a $x = -3$ b $x = 2$ c $x = 4$ d $x = 1$ e $x = 0$ f $x = 5$
- 1048 a $x = 1$ b $x = 9$ c $x = 3$ d $x = -3$ e $x = 2$ f $x = 4$
- 1049 a $5x$ b 0 c $-3x$ d $-y$ e $8x$ f $-a$
- 1050 a $18x - 8$ b $-2a + 12$ c $6x + 76$ d $-5x + 2$ e $x + 4$ f $-2y + 12$
- 1051 a $21x - 9$ b $6x - 24$ c $-6x + 72$ d $9x - 4$ e 16 f $2x + 2$

1052	a 55	b 24	c 54	d 17	e -39	f 12
1053	a 58	b 20	c -11	d -28	e 36	f -13
1054	a -3	b -9	c 9	d -6	e -4	f 7
1055	a 7	b -4	c 8	d -9	e -5	f 9
1056	a $-9x - 9y = 9$ c $-9x + 5y + 15 = 32$	b $24x - 14y + 2 = 78$ d $-5y + 25 = 0$				
1057	a $x = 4$	b $x = 8$	c $x = -3$	d $x = 2$	e $x = 2$	f $x = -3$
1058	a $x = 15$	b $x = 0$	c $x = 4$	d $x = -14$	e $x = -1$	f $x = -3$

11 Tema – P-töl

- 1101 a 15. januar b 2010
- 1102 Ja
- 1103 Genta
- 1104 a 27. desember 1949 b --- c Nei – tað skal óivað vera 271249-055
- 1105 a --- b --- c ---
- 1106 P-talið hjá Hansen er eitt konufólk. P-talið hjá Olsen er í lagi. P-talið hjá Jensen er ikki eitt P-tal.
- 1107 So skuldi hon verið drongur
- 1108 a Lotta er fødd 29. februar 1980
b Tummas er føddur 26. februar 1979
c Tummas minnst skeivt
- 1109 a Ja b Nei c 210999-418

12 Tema – Rokna við lummaroknara

- 1201 a 21 b 31 c 24 d 37 e 23 f 42
- 1202 a $x = 19$ ella $x = -19$ b $x = 27$ ella $x = -27$ c $x = 29$ ella $x = -29$
d $x = 37$ ella $x = -37$ e $x = 18$ ella $x = -18$ f $x = 22$ ella $x = -22$
- 1203 a $x = 16$ ella $x = -16$ b $x = 35$ ella $x = -35$ c $x = 33$ ella $x = -33$
d $x = 37$ ella $x = -37$ e $x = 23$ ella $x = -23$ f $x = 28$ ella $x = -28$
- 1204 a $x = 9,6$ b $x = 12,5$ c $x = 0,9$
d $x = 0,3$ e $x = 0$ f Ber ikki til
- 1205 a $x \approx 0,95$ b $x \approx 4,47$ c $x \approx 0,45$
d $x \approx 3,46$ e $x = 0,4$ f Ber ikki til
- 1206 a 1909 b 6865 c 3341 d 431 e 531 449 f 358 802
- 1207 a 333 858 511 b 16 204 669 c 1 158 336 342
d 14 585 e 14 341 259 f 1 046 767
- 1208 a 17 b 15,5 c 50 d 25 e 23 f 71,6
- 1209 a 243 b 65 536 c 1024
d 15 625 e 10 000 000 f 20 736
g 362 797 056 h 1 073 741 824 i 10 077 696
- 1210 a 11 664 b 593 c 2800 d 144 e 225 f 448
- 1211 a 72,40 kr b 307,20 kr c 2,52 kr d $\approx 1,47$ kr e 33,75 kr f 1680 kr
- 1212 a 48% b 26% c 58% d 90% e $\approx 0,5\%$ f 0,8%
- 1213 a 11 b 5 c $\approx 5,3$ d 0 e $\approx -1,67$ f -16
- 1214 a $1\frac{34}{45} \approx 1,756$ b $1\frac{11}{16} \approx 1,6875$ c $1\frac{5}{24} \approx 1,208$
d $1\frac{23}{40} = 1,575$ e $1\frac{29}{36} \approx 1,806$ f $1\frac{5}{8} = 1,625$
- 1215 a $12\frac{26}{45} \approx 12,578$ b $18\frac{5}{21} \approx 18,238$ c $13\frac{38}{45} \approx 13,844$
d $8\frac{47}{63} \approx 8,746$ e $9\frac{31}{50} = 9,62$ f $9\frac{5}{6} \approx 9,833$
- 1216 a $8\frac{1}{5} = 8,2$ b $11\frac{11}{15} \approx 11,733$ c $9\frac{9}{20} = 9,45$
d $11\frac{5}{8} = 11,625$ e $7\frac{17}{30} \approx 7,567$ f $7\frac{5}{6} \approx 7,833$
- 1217 a $27\frac{1}{8} \approx 27,13$ b $17\frac{7}{8} \approx 17,88$ c $10\frac{29}{40} \approx 10,73$
d $109\frac{23}{30} \approx 109,77$ e $59\frac{3}{8} \approx 59,38$ f $35\frac{11}{98} \approx 35,11$

1218 **a** 1232
 d $\approx 2963,33$

b 13 852,25
e 1956

c $925\frac{5}{6} \approx 925,83$
f $\approx 3593,33$

1219 **a** $76\frac{4}{41} \approx 76,10$
 d $99\frac{2}{77} \approx 99,03$

b $226\frac{14}{19} \approx 226,7$
e $79\frac{25}{41} \approx 79,61$

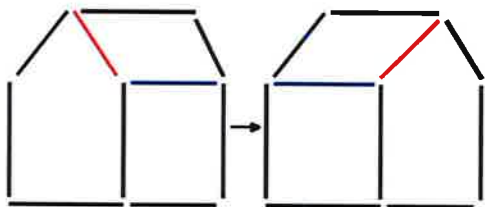
c $57\frac{3}{29} \approx 57,10$
f $250\frac{2}{27} \approx 250,07$

13 Høvuðbrýggj

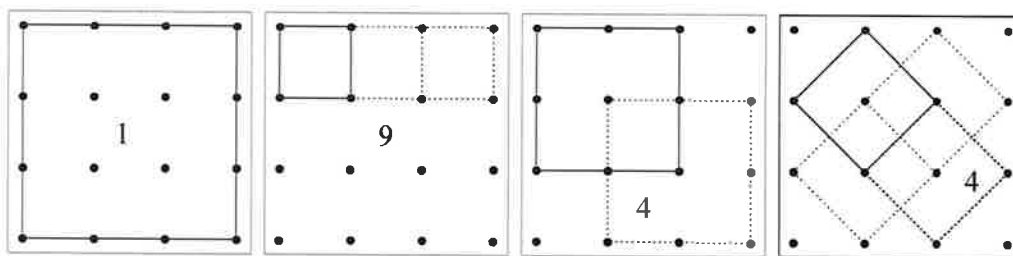
- 1 a Úrslitið verður hvørja ferð 1089.
b ---
- 2 Teir somu talstavnir, sum tú hevur skrivað, ganga óendaliga nógvar ferðir aftur í úrslitinum.
- 3 a Aftasti talstavur verður fluttur at standa fremstur.
b Ja
- 4 Ummálini eru líka stór.
- 5 19 dagar
- 6 11 null
- 7 $X = IV + VI$
- 8 14 smákøkur
- 9 Tølini eru 17 og 19.
- 10 6 tøl (30 – 60 – 90 – 120 – 150 og 180)
- 11 13
- 12 Rani er 9 ár, og Bjalla er 4 ár
- 13 4, 9 og 64
- 14 1101
- 15 111
- 16 a 4 ferðir b 56 c

1	2	3	4
2	3	4	1
3	4	1	2
4	1	2	3

17

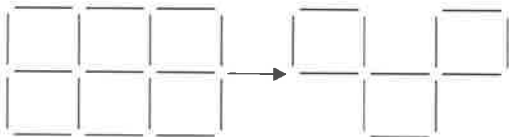


18



18 kvadrat til samans

19



20 66 sekund

21 33 cm^2

22 90 dúgvur, 180 gæs og 540 hœsn

23 2 tímar

24 25 terningar

25 7 dagar

26 18 kaninir og 22 dúgvur

27 $2^{20} \cdot \frac{1}{10} \text{ mm} = 104857,6 \text{ mm} \approx 104,9 \text{ m}$

28 Rómartalið II

29 Talið er 18

30 $71 + 72 + 73 + 74 + 75 = 365$

31 $142 + 150 + 158 = 450$

32 7, 9 og 13

33 18 næmingar

34 Ásvør fær 40 kr, Súni fær 80 kr, og Fróða fær 120 kr.

35 72 kr

36 224

37 Talið er -7

38 Tølini eru 17, 26 og 35