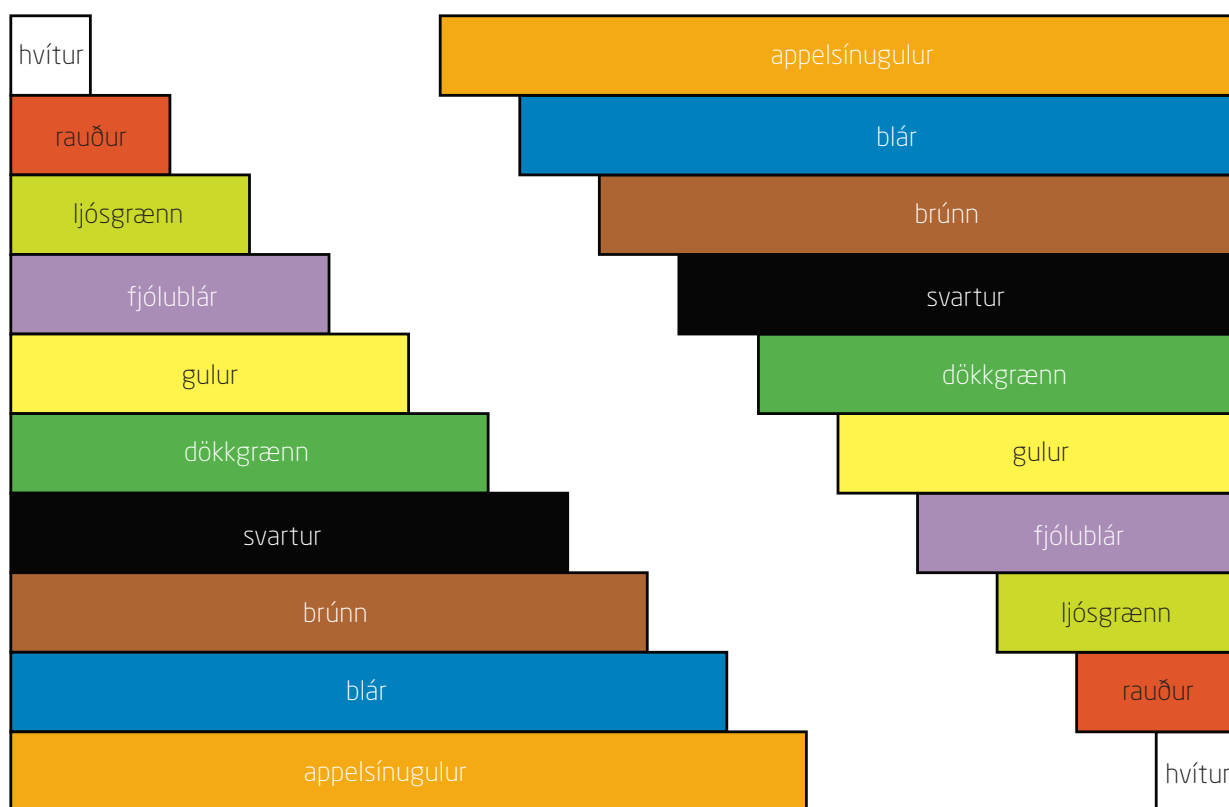
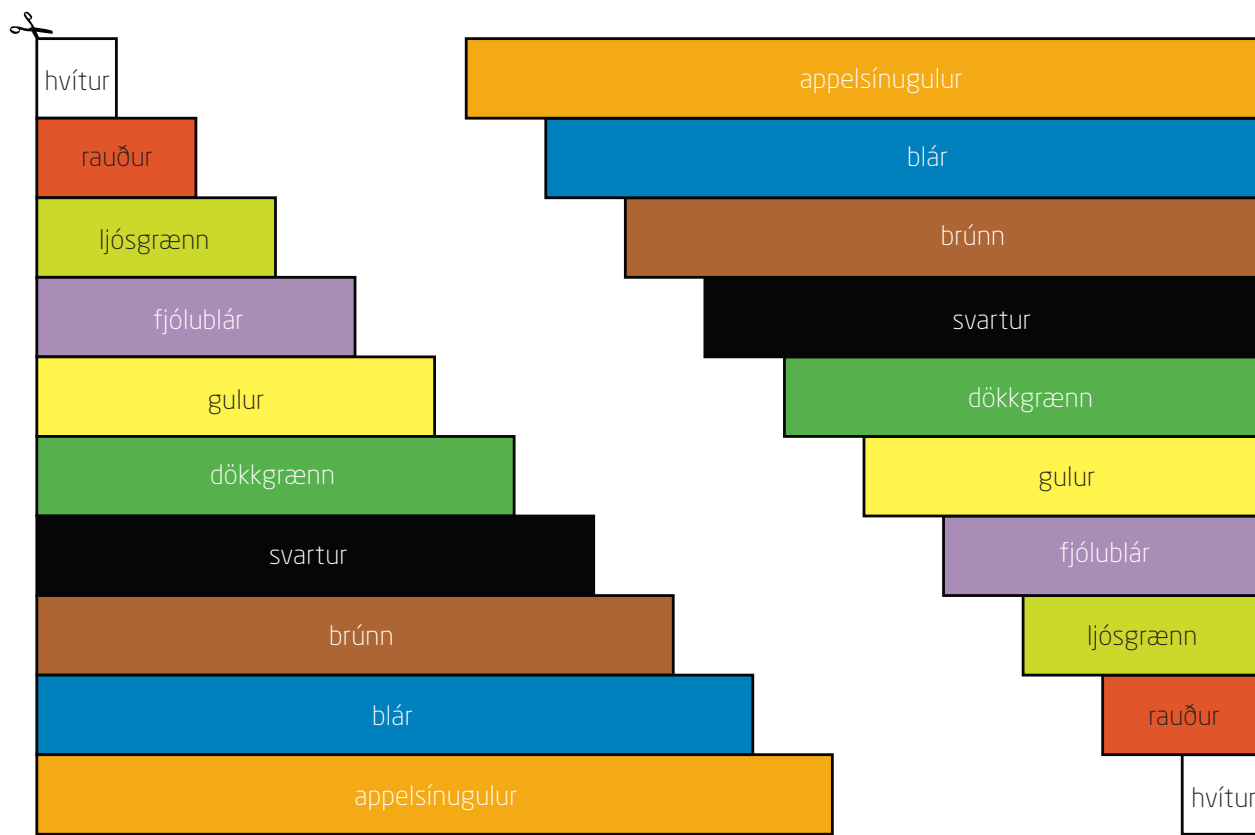
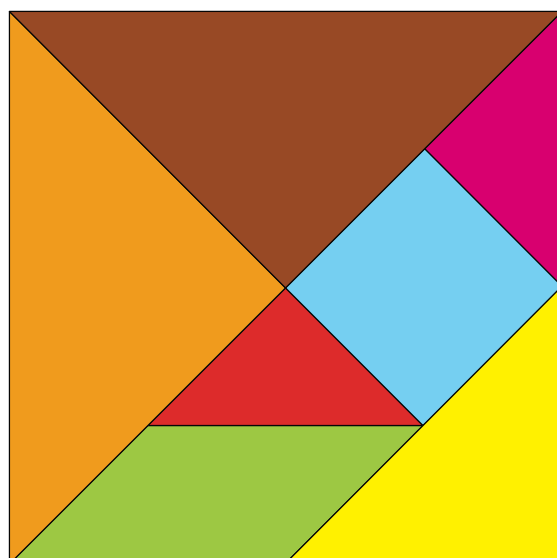
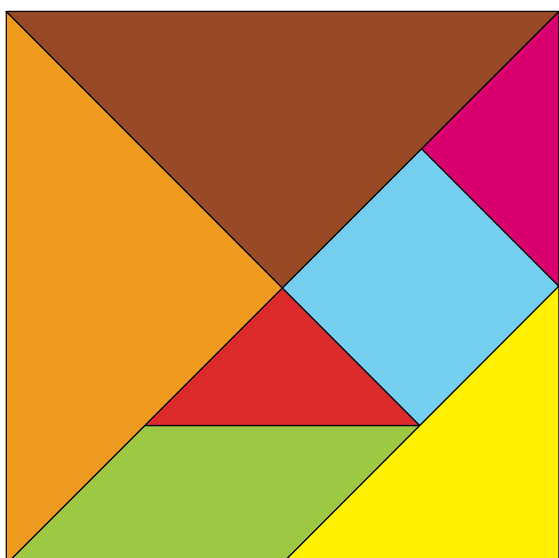
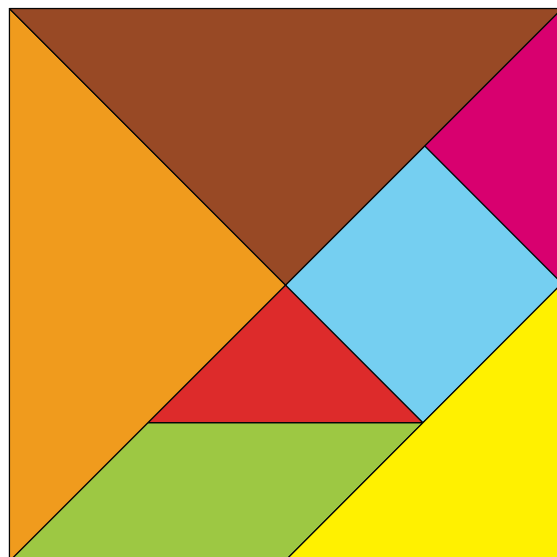
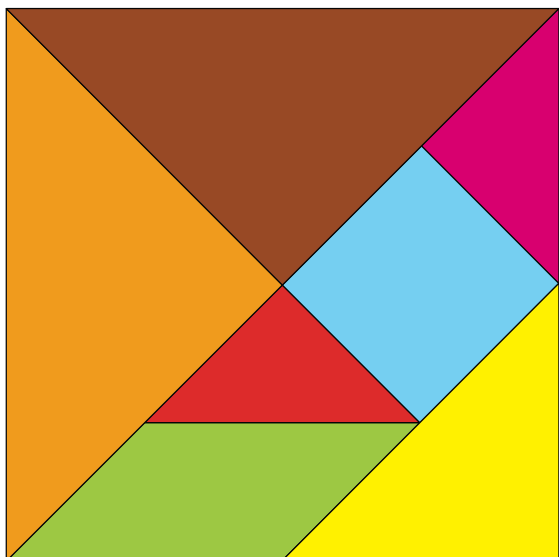
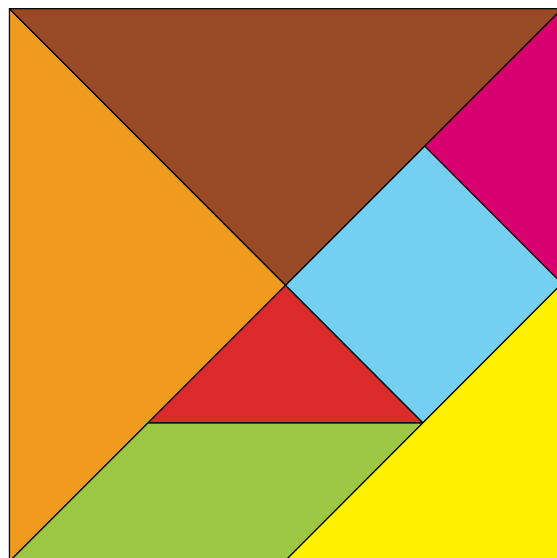
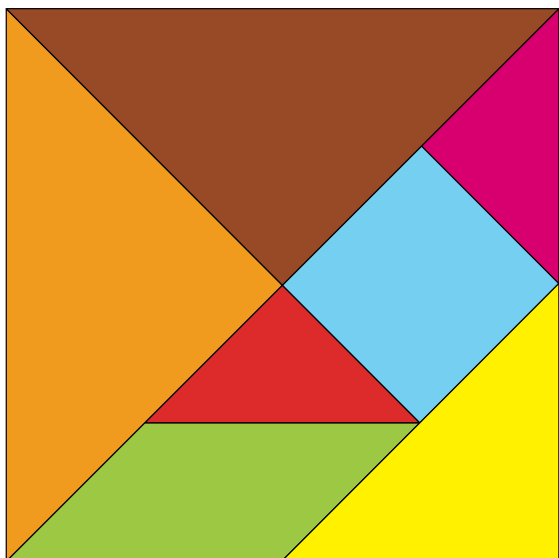


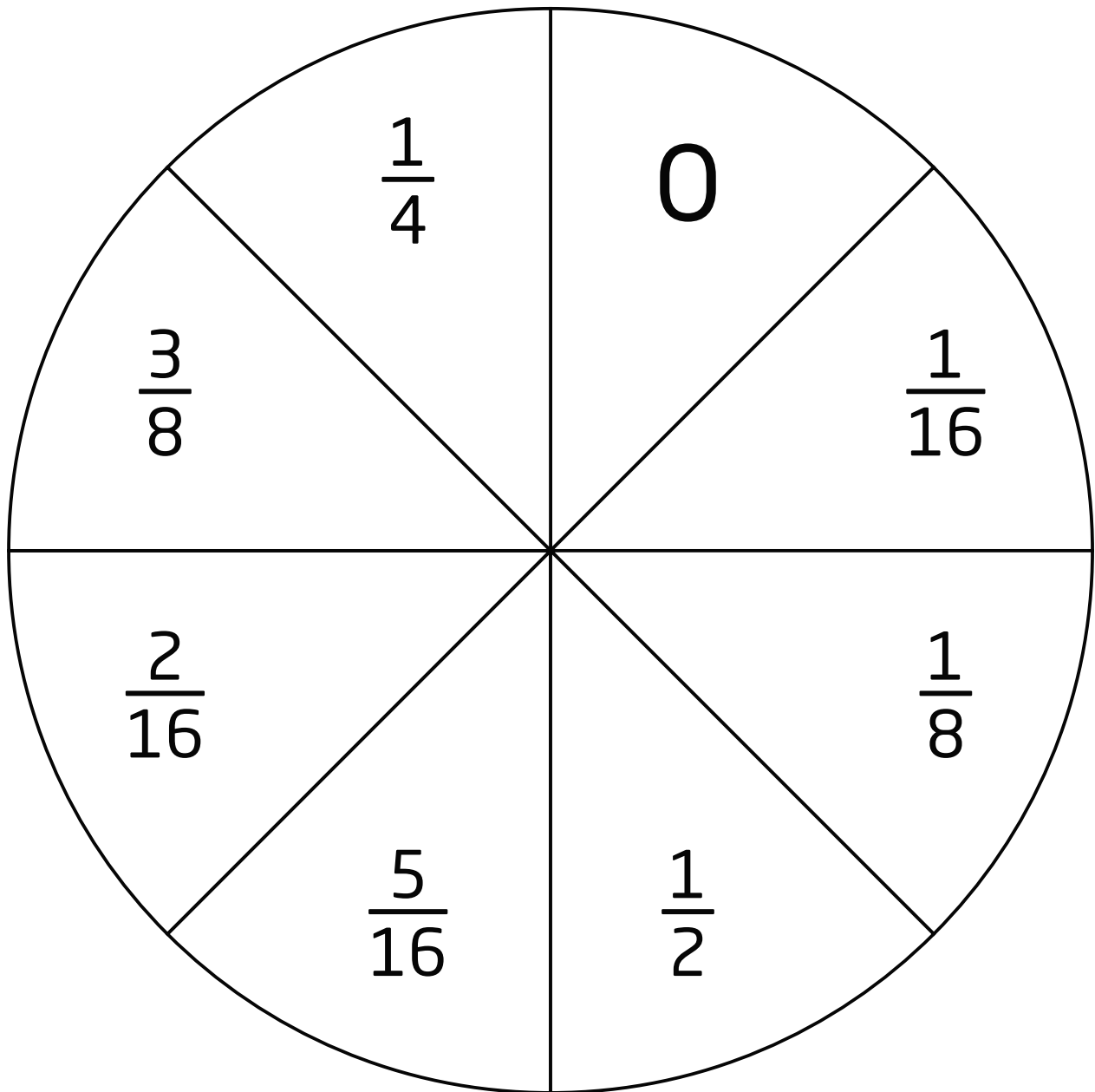
Verkefnahefti

3. kafli

Cuisinaire-kubbar



Tangram

Spilaskífa fyrir tangramspil

Brotaminnispil

$2\frac{2}{5}$	$\frac{12}{5}$	$2\frac{3}{5}$	$\frac{13}{5}$
$1\frac{2}{7}$	$1\frac{4}{7}$	$\frac{9}{7}$	$\frac{11}{7}$
$1\frac{1}{5}$	$\frac{6}{5}$	$1\frac{2}{3}$	$\frac{5}{3}$
$1\frac{1}{3}$	$\frac{4}{3}$	$3\frac{3}{5}$	$\frac{18}{5}$

Brotaspilaspjöld fyrir óeiginleg brot og blandnar tölur

f

$\frac{3}{2}$	$1\frac{1}{2}$	$\frac{9}{4}$	$2\frac{1}{4}$
$\frac{9}{2}$	$4\frac{1}{2}$	$\frac{9}{3}$	3
$\frac{5}{4}$	$1\frac{1}{4}$	$\frac{7}{4}$	$1\frac{3}{4}$
$\frac{7}{3}$	$2\frac{1}{3}$	$\frac{9}{5}$	$1\frac{4}{5}$
$\frac{8}{2}$	4	$\frac{5}{3}$	$1\frac{2}{3}$
$\frac{10}{4}$	$2\frac{1}{2}$	$\frac{7}{2}$	$3\frac{1}{2}$
$\frac{13}{2}$	$6\frac{1}{2}$	$\frac{11}{4}$	$2\frac{3}{4}$

Brotaspilaspjöld fyrir óeiginleg brot og blandnar tölur

$\frac{13}{2}$	$6\frac{1}{2}$	$\frac{11}{4}$	$2\frac{3}{4}$
$\frac{19}{5}$	$3\frac{4}{5}$	$\frac{16}{5}$	$3\frac{1}{5}$
$\frac{15}{4}$	$3\frac{3}{4}$	$\frac{17}{4}$	$4\frac{1}{4}$
$\frac{13}{3}$	$4\frac{1}{3}$	$\frac{17}{8}$	$2\frac{1}{8}$
$\frac{18}{12}$	$1\frac{1}{2}$	$\frac{16}{3}$	$5\frac{1}{3}$
$\frac{25}{4}$	$6\frac{1}{4}$	$\frac{17}{9}$	$1\frac{8}{9}$

Brotaspilaspjöld fyrir óeiginleg brot og blandnar tölur

$\frac{21}{6}$	$3\frac{1}{2}$	$\frac{15}{6}$	$2\frac{1}{2}$
$\frac{29}{5}$	$5\frac{4}{5}$	$\frac{16}{6}$	$2\frac{2}{3}$
$\frac{30}{8}$	$3\frac{3}{4}$	$\frac{34}{8}$	$4\frac{1}{4}$
$\frac{16}{3}$	$5\frac{1}{3}$	$\frac{14}{6}$	$2\frac{1}{3}$
$\frac{44}{12}$	$3\frac{2}{3}$	$\frac{26}{3}$	$8\frac{2}{3}$
$\frac{50}{4}$	$12\frac{1}{2}$	$\frac{19}{9}$	$2\frac{1}{9}$

Brotaspjöld fyrir talnalínuverkefni

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

Brotaspjöld

$\frac{1}{2}$	$\frac{2}{2}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{3}{3}$
$\frac{1}{4}$	$\frac{2}{4}$	$\frac{3}{4}$	$\frac{4}{4}$	$\frac{1}{5}$
$\frac{2}{5}$	$\frac{3}{5}$	$\frac{4}{5}$	$\frac{5}{5}$	$\frac{1}{8}$
$\frac{2}{8}$	$\frac{3}{8}$	$\frac{4}{8}$	$\frac{5}{8}$	$\frac{6}{8}$

Brotaspjöl

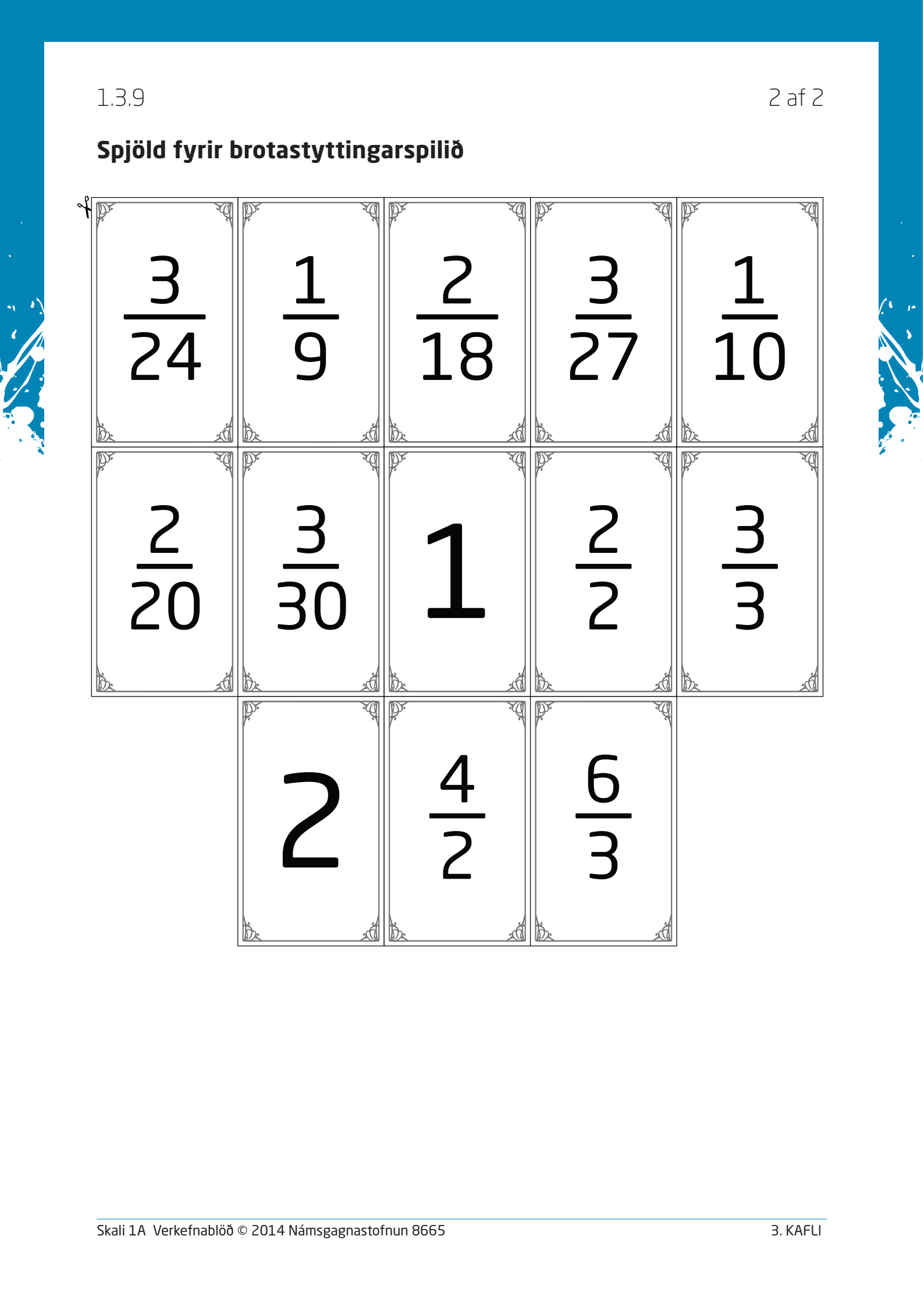
$\frac{7}{8}$	$\frac{8}{8}$	$\frac{2}{12}$	$\frac{3}{12}$	$\frac{4}{12}$
$\frac{6}{12}$	$\frac{8}{12}$	$\frac{10}{12}$	$\frac{1}{10}$	$\frac{2}{10}$
$\frac{3}{10}$	$\frac{4}{10}$	$\frac{5}{10}$	$\frac{6}{10}$	$\frac{7}{10}$
$\frac{8}{10}$	$\frac{9}{10}$	$\frac{10}{10}$	$\frac{1}{6}$	$\frac{5}{6}$

Brotarenningar

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

Spjöld fyrir brotastyttingarspilið

$\frac{1}{2}$	$\frac{2}{4}$	$\frac{3}{6}$	$\frac{1}{3}$	$\frac{2}{6}$
$\frac{3}{9}$	$\frac{1}{4}$	$\frac{2}{8}$	$\frac{3}{12}$	$\frac{1}{5}$
$\frac{2}{10}$	$\frac{3}{15}$	$\frac{1}{6}$	$\frac{2}{12}$	$\frac{3}{18}$
$\frac{1}{7}$	$\frac{2}{14}$	$\frac{3}{21}$	$\frac{1}{8}$	$\frac{2}{16}$

Spjöld fyrir brotastyttingarspilið

$\frac{3}{24}$	$\frac{1}{9}$	$\frac{2}{18}$	$\frac{3}{27}$	$\frac{1}{10}$
$\frac{2}{20}$	$\frac{3}{30}$	1	$\frac{2}{2}$	$\frac{3}{3}$
	2	$\frac{4}{2}$	$\frac{6}{3}$	

Samlagning með almennum brotum

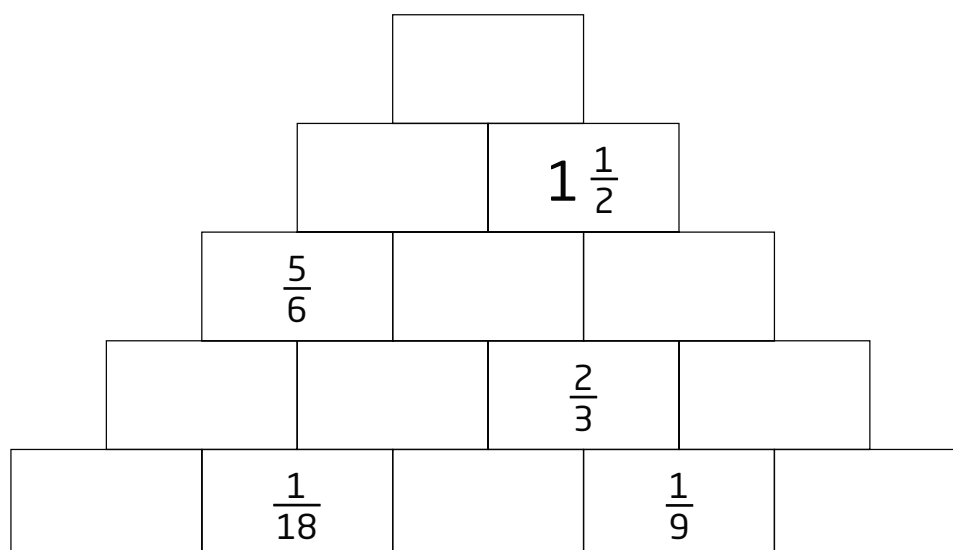
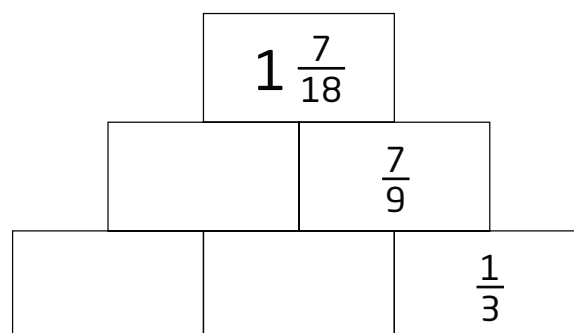
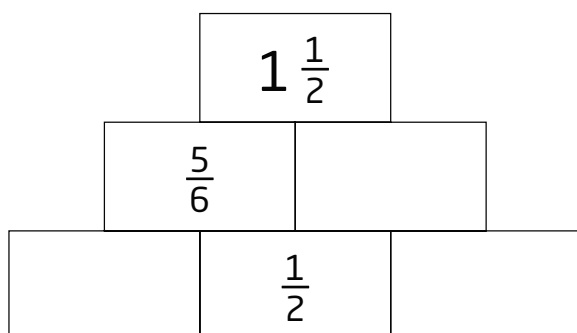
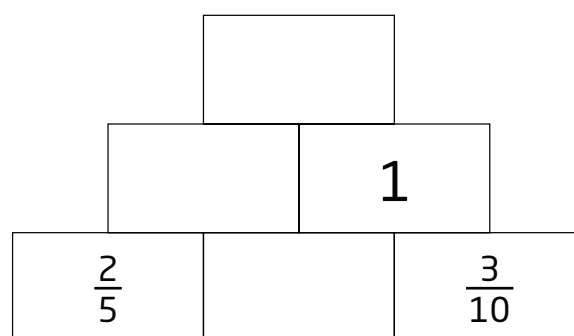
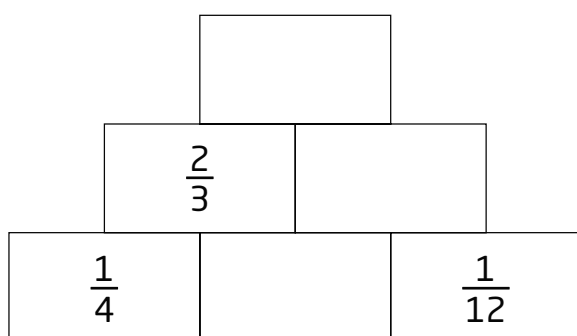
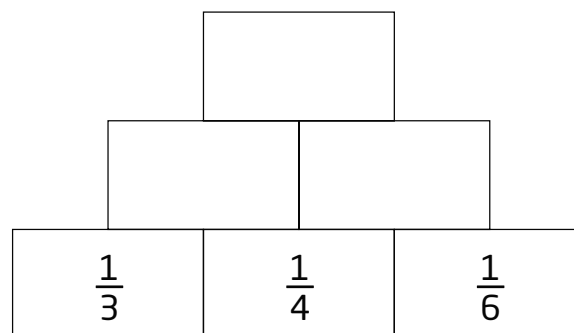
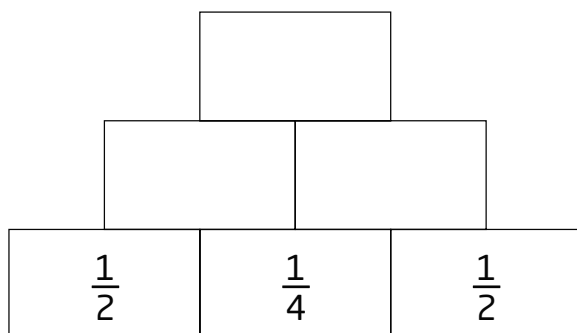
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Samlagning með almennum brotum

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$\frac{1}{2}$	$\frac{3}{8}$	$\frac{1}{4}$																	
$\frac{3}{8}$	$\frac{1}{4}$	$\frac{1}{2}$																	

1.3.11

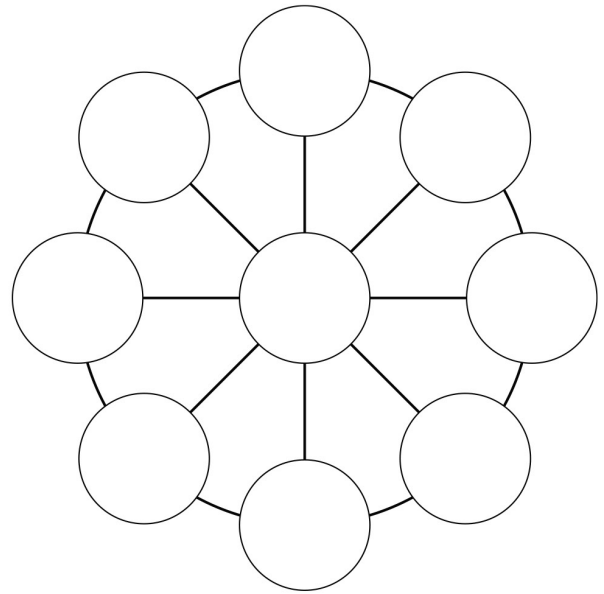
Brotapíramíðar



Brotaprautir

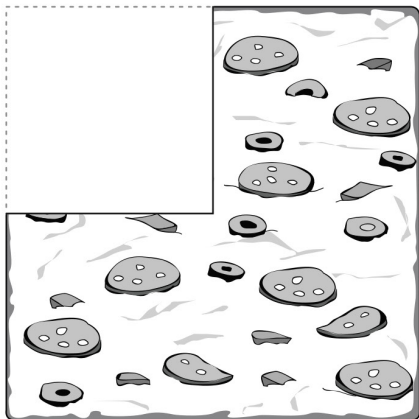
- A** Raðaðu tölunum hér fyrir neðan í hringina þannig að summa hringjanna, sem eru á beinu línunum, verði 9.

$2\frac{1}{4}$	$1\frac{1}{2}$	0	3	$5\frac{1}{4}$
6	$4\frac{3}{4}$	$3\frac{3}{4}$	$\frac{3}{4}$	



- B** Fyrsti þriðjungurinn af veginum frá A-bæ til B-bæjar er malarvegur en með fram síðasta fjórðungnum eru ljósastaurar. Þar á milli er 20 km steiptur vegur án ljósastaura.

Hvað er langt frá A-bæ til B-bæjar? _____



- C** María býður þremur vinum í pitsu. Hún bakar ferningslaga pitsu en uppgötvar skyndilega að Kári stóribróðir hefur hrifsað $\frac{1}{4}$ af pitsunni án þess að spyrja kóng eða prest.

Hjálpaðu Maríu að skipta afgangnum af pitsunni í fjórar jafn stórar sneiðar.

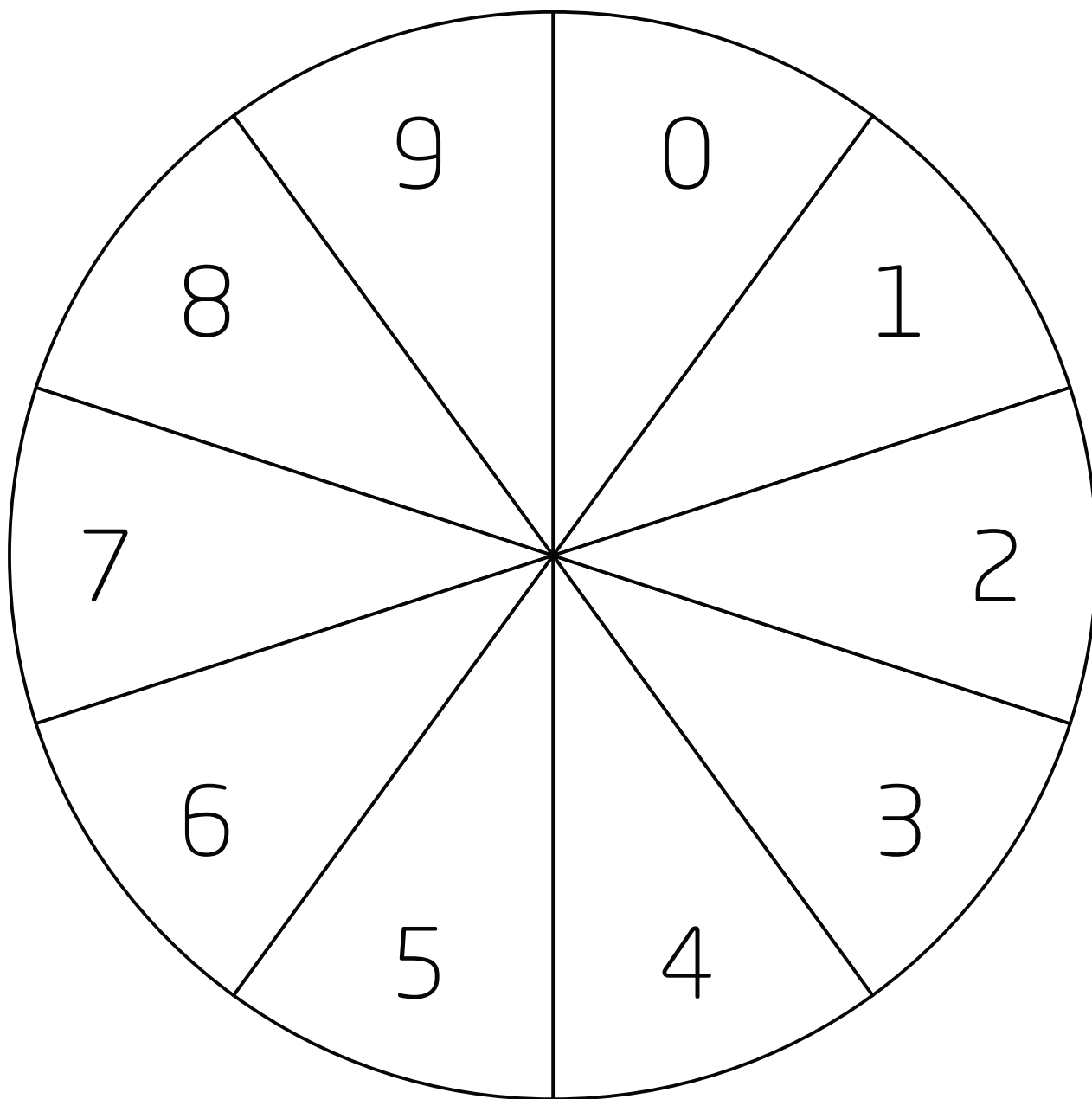
- D** Ofan á 10 m háum vegg liggur ostbiti. Lítil mús reynir að klifra upp til að ná ostinum. Á hverjum degi klifrar hún $3\frac{1}{3}$ m upp en á hverri nóttu rennur hún $1\frac{2}{3}$ m niður aftur.

Á hvaða degi nær músin ostbitanum?



1.3.13

Spilaskífa 0-9



Tugabrotaspjöld

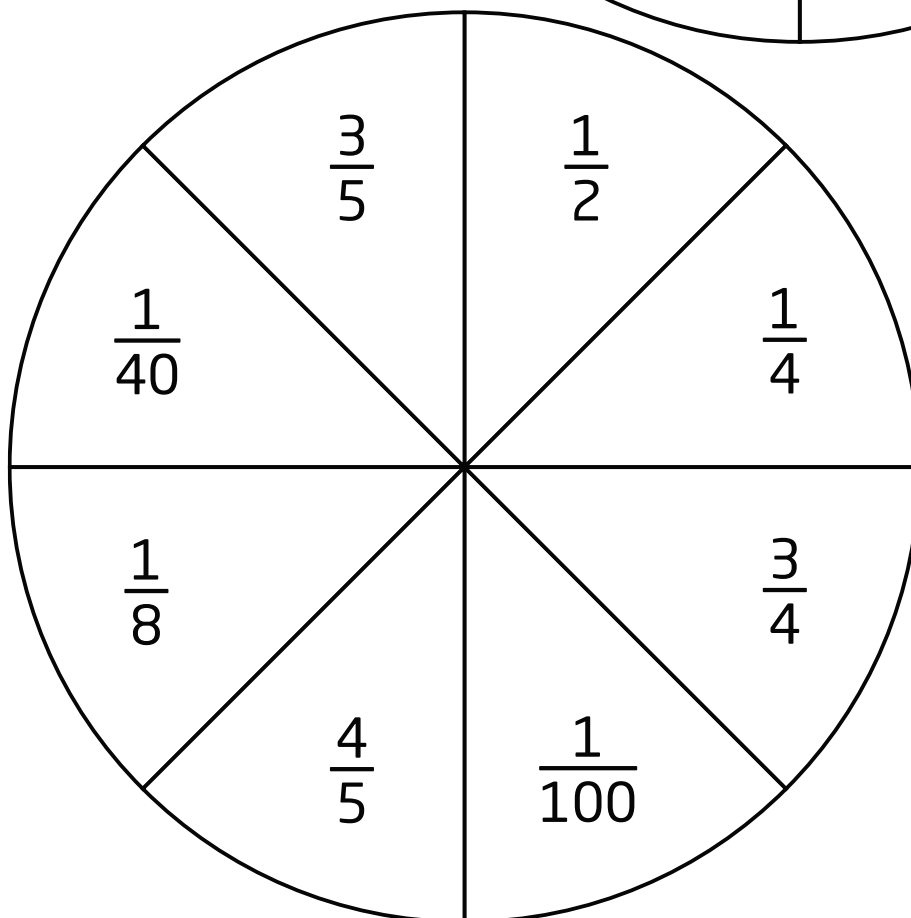
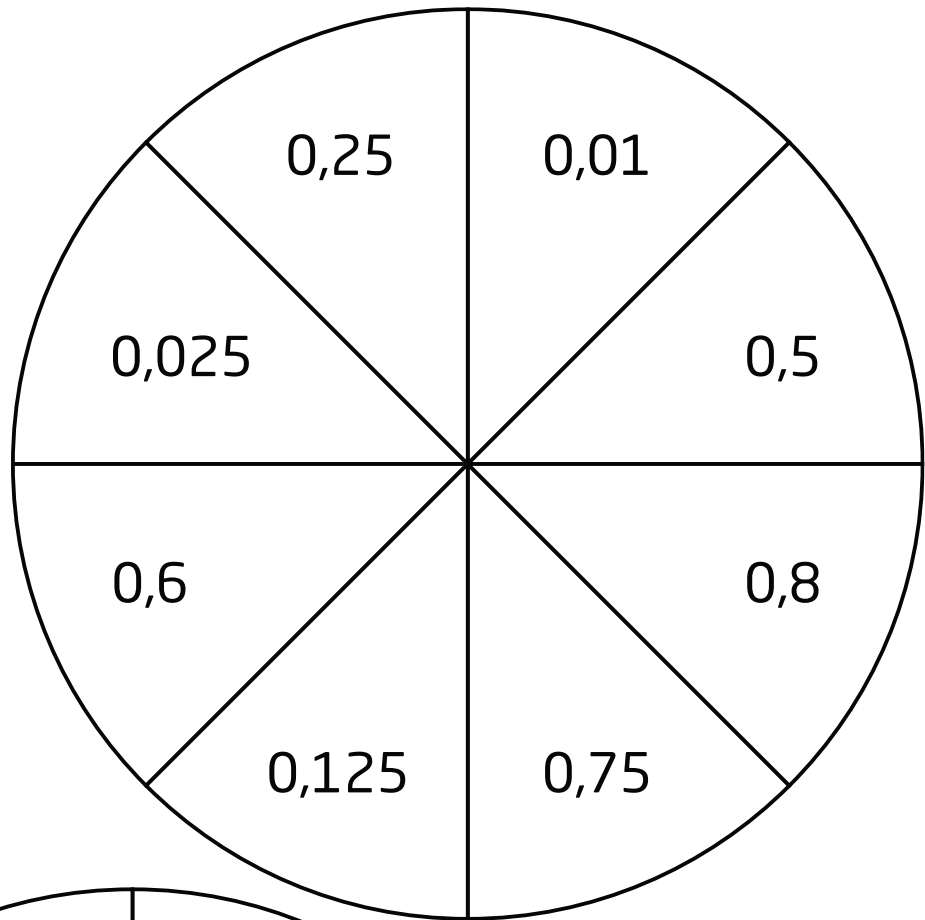
0,60	0,25	0,75	0,40
0,80	0,33	0,50	0,63
0,20	0,15	0,98	0,30
0,55	0,45	0,90	0,83
0,43	0,68	0,72	0,85
0,05	0,18	0,79	0,38
0,42	0,02	0,95	0,69

Tugabrotaspjöld

0,650	0,254	0,755	0,450
0,800	0,333	0,504	0,633
0,210	0,165	0,988	0,330
0,585	0,445	0,980	0,833
0,433	0,668	0,772	0,885
0,005	0,018	0,709	0,368
0,402	0,002	0,925	0,659

1.3.15

Spilaskífuþríð



Almenn brot – Tugabrot

Klippa skal spjöldin út þannig að almennt brot og samsvarandi tugabrot séu hvort sínum megin á spjaldinu. Nemendur geta æft sig í algengustu brotum með því að byrja á tugabrotinu og nefna samsvarandi almennt brot eða öfugt.

$\frac{2}{3}$	0,67	$\frac{1}{4}$	0,25
$\frac{4}{5}$	0,80	$\frac{1}{3}$	0,33
$\frac{1}{5}$	0,20	$\frac{7}{10}$	0,70
$\frac{3}{100}$	0,03	$\frac{1}{100}$	0,01
$\frac{3}{4}$	0,75	$\frac{2}{5}$	0,40
$\frac{1}{2}$	0,50	$\frac{3}{5}$	0,60
$\frac{1}{10}$	0,10	$\frac{3}{10}$	0,30
$\frac{9}{10}$	0,90	$\frac{5}{6}$	0,83

1.3.17

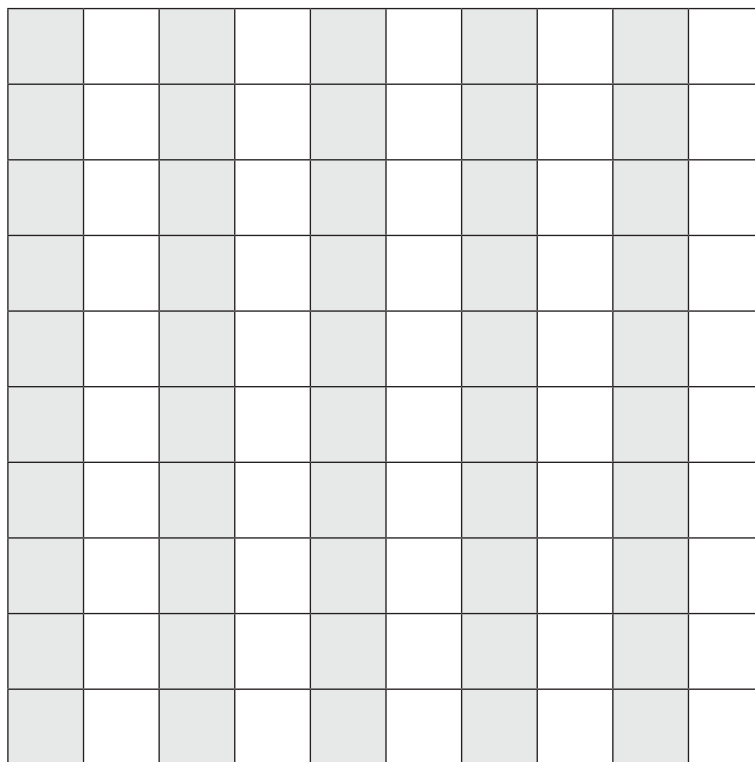
Meiri námundun

Fylgdu reglum um námundun og námundaðu tölurnar.

Tölur	Næsti tugur	Næsta heila tala	Næsti tíundi hluti	Næsti hundraðshluti
34,1209				
215,29756				
0,0649				
1,0089				
19,1				
209,098				
7,45983				
0,12479				
0,0121				
3600,999				
2,5				
7,309				
0,0197				
12,528				
128,06				
1,01				
3690,641				
45,321				
65,1098				
4,3225				
2,888				
4,02				
19,1729				
309,207				
0,000589				
32,1028				
0,0019				

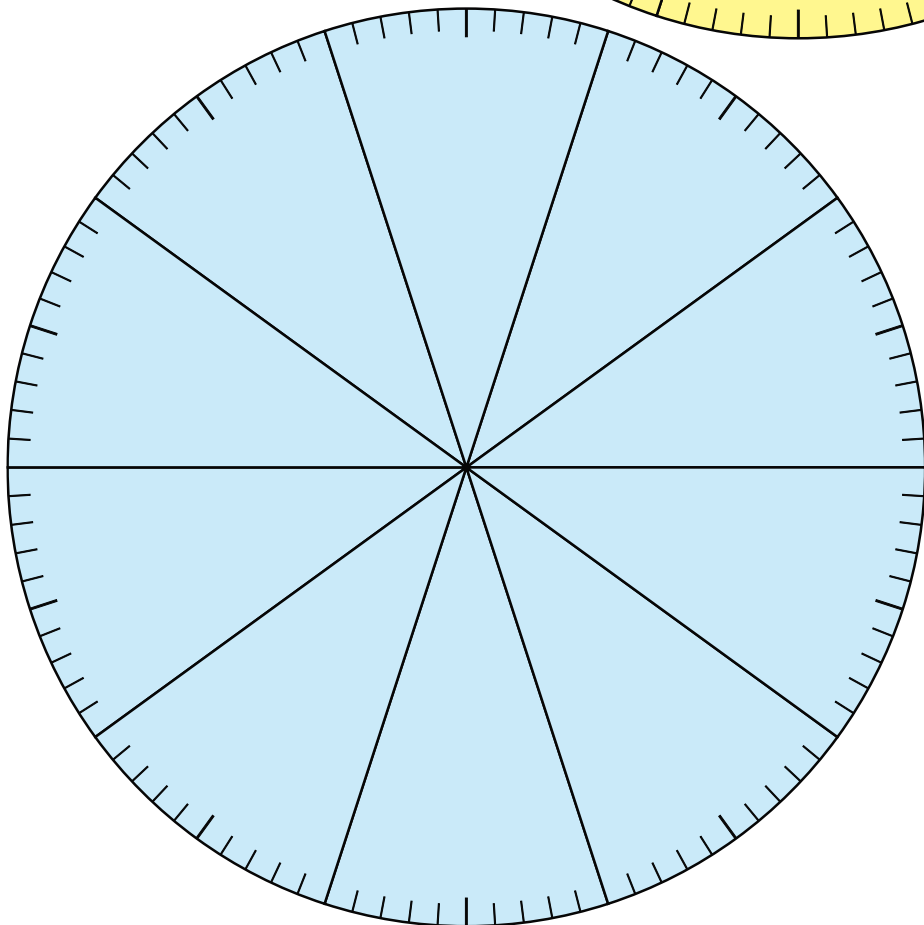
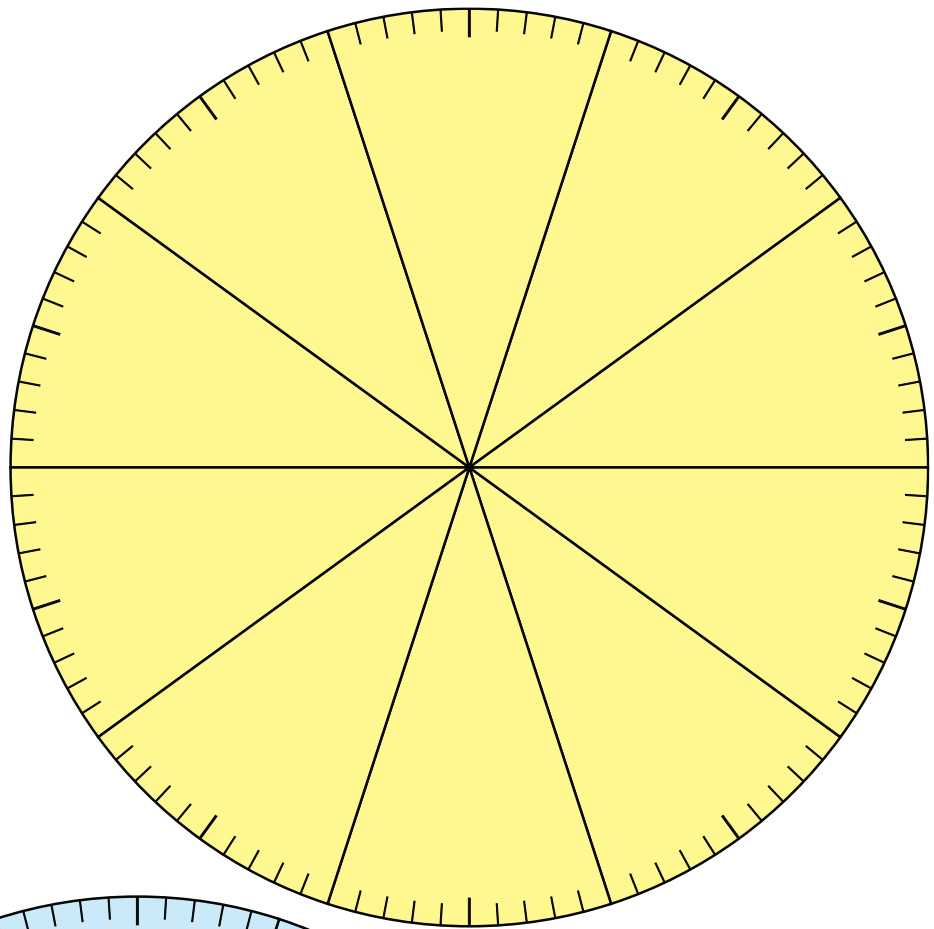
1.3.18

Hundrað reitir verða einn metri



1.3.19

Talnahjól



Hugareikningsdómínó – 30 spjöld

Ég á 50%. Hver á tölu sem er jafngild 0,8?	Ég á $\frac{4}{5}$. Hver á tölu sem er jafngild 0,12?	Ég á 12%. Hver á tölu sem er jafngild $\frac{1}{4}$.
Ég á 0,25. Hver á tölu sem er jafngild 0,01?	Ég á 1%. Hver á tölu sem er jafngild 20%?	Ég á $\frac{1}{5}$. Hver á tölu sem er jafngild 6%?
Ég á $\frac{3}{50}$. Hver á tölu sem er jafngild 60%?	Ég á 0,6. Hver á tölu sem er jafngild 12,5%?	Ég á $\frac{1}{8}$. Hver á tölu sem er jafngild 16%?
Ég á $\frac{4}{25}$. Hver á tölu sem er jafngild $\frac{1}{10}$?	Ég á 10%. Hver á tölu sem er jafngild 1,2?	Ég á 120%. Hver á tölu sem er jafngild 0,02?
Ég á $\frac{1}{50}$. Hver á tölu sem er jafngild 75%?	Ég á $\frac{3}{4}$. Hver á tölu sem er jafngild $\frac{1}{20}$?	Ég á 5%. Hver á tölu sem er jafngild 0,005?
Ég á 0,5%. Hver á tölu sem er jafngild 0,4?	Ég á $\frac{2}{5}$. Hver á tölu sem er jafngild 100%?	Ég á 1. Hver á tölu sem er jafngild 90%?
Ég á 0,9. Hver á tölu sem er jafngild 150%?	Ég á $\frac{3}{2}$. Hver á tölu sem er jafngild 4%?	Ég á $\frac{1}{25}$. Hver á tölu sem er jafngild 0,03%?
Ég á 3%. Hver á tölu sem er jafngild $\frac{17}{100}$?	Ég á 0,17%. Hver á tölu sem er jafngild 28%?	Ég á $\frac{7}{25}$. Hver á tölu sem er jafngild $\frac{3}{20}$?
Ég á 15%. Hver á tölu sem er jafngild 13%?	Ég á $\frac{13}{100}$? Hver á tölu sem er jafngild 2?	Ég á 200%. Hver á tölu sem er jafngild 65%?
Ég á $\frac{13}{20}$. Hver á tölu sem er jafngild 0,09?	Ég á 9%. Hver á tölu sem er jafngild 0,99?	Ég á 99%. Hver á tölu sem er jafngild 0,5?

1.3.21

Spjöld til að raða á talnalínu

$\frac{1}{3}$	$\frac{1}{4}$	$\frac{1}{10}$	$\frac{2}{5}$
$\frac{3}{5}$	$\frac{1}{8}$	25%	55%
$\frac{5}{6}$	$\frac{1}{2}$	$\frac{4}{5}$	30%
8%	0,6	$\frac{3}{4}$	0,9
0,4	80%	0,28	15%
0,5	0,7	0,85	$\frac{1}{20}$
5%			

Almenn brot - Prósent - Tugabrot

Finndu blönduna 1!

1A $\frac{2}{15}$ af drykknum eru ísmolar.	2A 20% af drykknum eru ananas.
3A 150 grömm af drykknum eru vanillujógúrt.	4A $\frac{1}{6}$ af drykknum er bananar.
5A Helmingurinn af drykknum er vanillujógúrt.	6A Í drykknum er 10 grömmum meira af ananas en af banönum.

Almenn brot - Prósent - Tugabrot

Finndu blönduna 2!

1B 20% af drykknum eru bananar.	2B $\frac{3}{7}$ af drykknum eru úr jarðarberjajógúrt.
3B 220 grömm af drykknum eru frosin jarðarber.	4B af drykknum eru $\frac{3}{14}$ mjólk.
5B Í drykknum er tvöfalt meira af jarðarberjajógúrt en mjólk.	6BA Í drykknum eru samtals 500 grömm af jarðarberjum og banönum.

Burt með töluna!

Í hverjum flokki fjögurra talna er ein sem passar ekki við hinar.
Hvaða tala skal burt og hvers vegna?

A

0,2	$\frac{2}{10}$
20%	$\frac{2}{100}$

F

20%	0,3
$\frac{1}{3}$	0,6

B

75%	3,4
$\frac{3}{4}$	0,75

G

$1\frac{1}{2}$	1,5
50%	150%

C

$\frac{4}{15}$	$\frac{3}{5}$
$\frac{2}{3}$	$\frac{2}{7}$

H

$\frac{6}{5}$	6,5
1,2	$1\frac{1}{5}$

D

1,8	80%
$\frac{9}{5}$	180%

I

0,75	0,80
0,92	105%

E

12%	$\frac{2}{16}$
$\frac{1}{8}$	0,125

J

$\frac{1}{2}$	50%
0,2	$\frac{3}{6}$