

$$\frac{1}{3} \quad 30\% \quad 0,25 \quad \frac{75}{100} \quad 0,8999$$

$$90\% \quad 0,09 \quad \frac{89}{90}$$

0,33... , 0,3 , 0,25 , 0,75 , 0,8999 , 0,90 , 0,09 , 0,988...

$$89:90 = 0,9888...$$

$$\begin{array}{r} 0 \\ 890 \\ 810 \\ \hline 800 \\ 720 \\ \hline 80 \end{array}$$

nov. 28-08.47

0,33... , 0,3 , 0,25 , 0,75 , 0,8999 , 0,90 , 0,09 , 0,988...

0,09 , 0,25 , 30% , $\frac{1}{3}$, $\frac{75}{100}$, 0,8999 , 10% , $\frac{89}{90}$

$$\frac{89}{99} \approx \frac{99}{100} = 0,99 >> 0,90$$

Malig argumentasjon

nov. 28-09.17

1d ii) $0,8999 < 0,9$ er $0,9$

Elevfeil 1: $0,8999 > 0,9000$

fordi $0,8999$ har fire desimale

Elevfeil $0,09 = 0,9$

↑
Ignorerer denne 0'ere.

Der vet $09 = 9$

-
- Kobleger om det er misoppfatning
 - sifferene null, alle, ni, ni, ni
 - skrive alle helt ut
 - posisjonsystem

nov. 28-09.22

2a - H-15

$0,75 : 0,5$



0,5

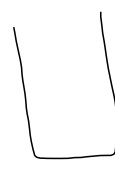
0,25



0,5



0,25



0,5



Fyllt 1,5 glass

$0,75 : 0,5 = 1,5$

nov. 28-09.31

$$ii) \quad 0,75 \cdot 20,80$$

Et kg epler koster 20,80. V:
 kjøper 0,75 kg. Hva betaler vi for
 dette?

$$\frac{20,80}{2} = 10,40 \quad \text{per halv kilo}$$

$$\frac{10,40}{2} = 5,20 \quad \text{per kvart kilo}$$

$$\text{Tre kvart kilo:} \quad 10,40 + 5,20 = \underline{\underline{15,60}}$$

nov. 28-09.35

$$1 \text{ kg: } 20,80$$

$$\frac{1}{4} \text{ kg: } 5,20$$

$$\frac{3}{4} \text{ kg: } 3 \cdot 5,20 = \underline{\underline{15,60}}$$

$$\begin{array}{r} \cdot 20,80 \\ \hline 10000 \\ 14,50 \\ \hline \end{array}$$

0 peng

nov. 28-09.38

26 $\frac{1,25 \cdot 3,4}{} \Rightarrow 125 \cdot 34 = 4250$

$\frac{125}{100} \cdot \frac{34}{10} = \frac{125 \cdot 34}{1000} = \frac{4250}{1000} = \underline{\underline{4,250}}$

$1,25 \cdot 3,4 \approx 1 \cdot 3 = \underline{\underline{3}}$

nov. 28-09.45

1c) $\begin{array}{r} 12,29 \\ - 2,80 \\ \hline \underline{\underline{9,49}} \end{array}$ Rett sva

$\begin{array}{r} 12,29 \\ - 2,80 \\ \hline 8,49 \end{array}$ Denne er fork

$\begin{array}{r} 12,29 \\ - 2,8 \\ \hline \underline{\underline{9,49}} \end{array}$ 8 lattet er salt som hundredel.

nov. 28-09.49

$$\begin{array}{r} \overset{10}{} \\ 12,29 \\ - 2,80 \\ \hline 10,49 \\ \hline \hline \end{array}$$

glent at han
han vebilet.

$$36) \begin{array}{r} \overset{10}{} \overset{10}{} \\ 40 \\ - 7,63 \\ \hline 77 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \overset{10}{} \\ 40. \\ - 1,63 \\ \hline 2,43 \\ \hline \hline \end{array} \quad 4,0$$

$$\begin{array}{r} 1,63 \\ - 40 \\ \hline 1,23 \\ \hline \hline \end{array}$$

- 1) $163 > 40$
- 2) 4 øy rojustering.

nov. 28-09.53

40) i) $0,062$

ii) $0,292929 \dots$

i) $0,062 = \frac{62}{1000} = \frac{31}{500}$

$0,292929 \dots$

$x = 0,292929 \dots \quad | \cdot 100$

$100x = 29,292929 \dots \quad \bar{I}$

$x = 0,292929 \dots \quad \bar{II}$

$99x = 29 \quad x = \frac{29}{99}$ $\bar{I} - \bar{II}$

nov. 28-10.25

V-16 (c)

1) $\frac{3}{5}$ er litt større enn en halv

2) $\frac{3}{5} = \frac{6}{10} = 0,6$

$$3 : 5 = 0,6$$

$$\begin{array}{r} 0 \\ 30 \\ 30 \\ \hline 0 \end{array}$$



nov. 28-10.34

$$37,5 : 0,75 =$$

På gården lager vi eplejuft. Tanker
 har 37,5 l. V. kopper på flasker som
 har 0,75 l.

1 flaske = 0,75 l		20 + 20 + 10 = 50
10 flasker = 7,5 l		=> 37,5 l.
20 flasker = 15 l		

75 l kopper på 0,75 l flasker

100 flasker => siden vi har 37,5 og ikke 75
 får vi 50 flasker

nov. 28-10.38

Irrasjonalt tall = tall som ikke kan
skrives som brøk

$$\sqrt{2} = 1,414213562 \quad \text{Inkl. mennesk}$$

$$\pi = 3,141592654 \quad \text{--- " ---}$$

$$1,0100200030004 \dots$$

$$\sqrt{2}, \pi$$

Hva er et rasjonalt tall:

Tall som kan skrives som brøk

$$\frac{3}{5}, 2 = \frac{2}{1}, \frac{1}{3}, \frac{7}{5} \dots$$

nov. 28-10.46

2e) alt 1. $\frac{1}{2} \cdot 20 = 10$

$$\frac{1}{3} \cdot 20 = 6,67$$

$$\frac{1}{4} \cdot 20 = 5$$

$$\frac{1}{5} \cdot 20 = 4$$

alt 2:

$$2 \cdot 6,5 = 13$$

$$3 \cdot 6,5 = 19,5$$

$$4 \cdot 6,5 = 26$$

$$5 \cdot 6,5 = 32,5$$

cc $\frac{1}{3}$ av prize

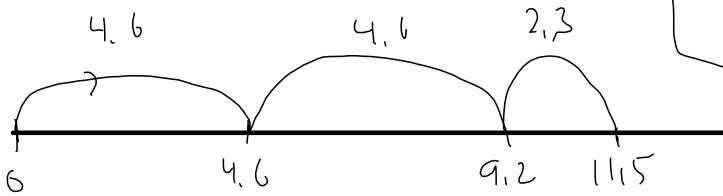
nov. 28-10.53

46 - v - 16

2.5 · 4.6
₃

$$\begin{array}{r} 2,5 \cdot 4,6 \\ \hline 230 \\ 92 \\ \hline 11,50 \end{array}$$

0 - pdes



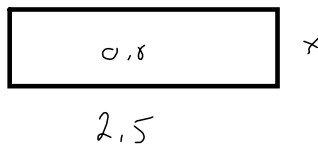
Visthal er at 4.6 h o s en halv gas.

nov. 28-11.17

40 i)

2.5 m lang

A = 0.8 m²



A = l · G

$$G = \frac{A}{l} = \frac{0,8}{2,5}$$

R

= 0,8 : 2,5

2) En tredjedel av

800 : 2,5

$$\frac{800}{2,5}$$

$$\frac{800}{1000 \cdot 2,5} = \frac{0,8}{2,5}$$

R

$$\frac{\frac{800}{2,5} \cdot 2,5}{1000 \cdot 2,5}$$

=

$$\frac{800}{1000 \cdot 2,5} = \frac{800}{1000} \cdot \frac{1}{2,5} = 0,8 : 2,5$$

nov. 28-11.23

$$3) \quad 0,8 \quad 2,5$$

$$\frac{0,4}{5} \neq \frac{0,8 \cdot 2}{2,5 \cdot 2} \quad ?$$

Feil = $\frac{1,6}{5}$

nov. 28-11.29

$$4) \quad \frac{0,8}{10} \cdot 4 = \frac{0,8 \cdot 4}{2,5 \cdot 4}$$

$$= \frac{0,8}{2,5} \quad R$$

1,2,4 er horisontale

nov. 28-11.31

37.5 kg fordeler på pose på

0,75 kg?

The diagram shows two bags. The left bag is labeled 'kake 37.5 kg'. The right bag is labeled '0,75 kg' and contains several small circles representing pieces of cake.

nov. 28-11.34

$$\frac{15}{40} = \frac{75}{200} = \frac{37,5}{100} = \underline{\underline{37,5}} \text{ (E-F)}$$

$$0,75 \cdot \frac{4}{5} = \frac{3}{4} \cdot \frac{4}{5} = \frac{12}{20} = \frac{6}{10} = \underline{\underline{\frac{3}{5}}}$$

The grid is a 5x5 square. The top three rows are highlighted in pink. To the right of the grid is the fraction $\frac{12}{20}$ in green. An arrow points from $\frac{12}{20}$ to $\frac{3}{5}$. Below the grid is a number line from 0 to 1 with tick marks at $\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, \frac{4}{5}$. An 'x' is marked above the $\frac{4}{5}$ tick.

nov. 28-11.40

A B

2 3

2 3

sidene i B $\frac{3}{2} = 1,5$ ganger lengre
enn sidene i A

nov. 28-11.56

Salt Ta en del saft og fire
dele vann 1:4

1.49 Annull stp kuller er x

$\frac{2}{5}$ er i saft.

$\frac{1}{3}$ er i realfars

12 stp i Regnskap

$$\frac{2}{5}x + \frac{1}{3}x + 12 = x$$

nov. 28-11.58

$$\frac{2}{5}x + \frac{1}{3}x + 12 = x \quad | \cdot 15$$

$$15 \cdot \frac{2}{5}x + 15 \cdot \frac{1}{3}x + 12 \cdot 15 = 15x$$

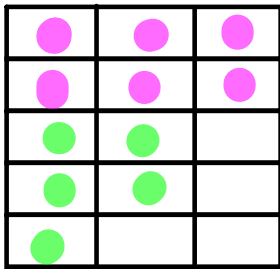
$$3 \cdot 2x + 5 \cdot 1 \cdot x + 180 = 15x$$

$$\underline{6x} + \underline{5x} + 180 = 15x$$

$$180 = 4x$$

$$x = \frac{180}{4} = \underline{\underline{45}}$$

nov. 28-12.37



4 rader og ragnshup

12 stp

1 rade og 3 stp

$$\begin{array}{r} \text{Samf} : 6 \cdot 3 = 18 \text{ stp} \\ \text{Real} : 5 \cdot 3 = 15 \text{ stp} \\ \text{Ragnshup} = 12 \text{ stp} \\ \hline 45 \text{ stp} \end{array}$$

nov. 28-12.40

$$\frac{2}{5} \text{ os } \frac{1}{3}$$

$$\frac{6}{15} \text{ os } \frac{5}{15}$$

$$\frac{1}{15} = 3 \text{ stp}$$

Reynslap : $\frac{4}{15} = 12 \text{ stp}$

nov. 28-12.43

1.51

$$\frac{1}{4} = \frac{3}{12} \quad \frac{5}{6} = \frac{10}{12}$$

$$\frac{3}{12} + 210 = \frac{10}{12}$$

↓

$$\frac{7}{12}$$

$$210 \text{ L} : \frac{7}{12}$$

$$30 \text{ L} \Rightarrow \frac{1}{12}$$

$$\frac{12}{12} = 30 \cdot 12 = \underline{\underline{360}}$$

nov. 28-12.44

x liter

$$\frac{1}{4}x + 210 = \frac{5}{6}x$$

1.12

$$3x + 2520 = 10x$$

$$2520 = 7x$$

$$x = \frac{2520}{7} = \underline{\underline{360}}$$

nov. 28-12.49

1.52

$\frac{4}{5}$ stemte. Ar disse stemte

$\frac{4}{7}$ pc AP

Hvis usikker: Bar 1000 personer

Hvor mange har stemt: 800 har stemt

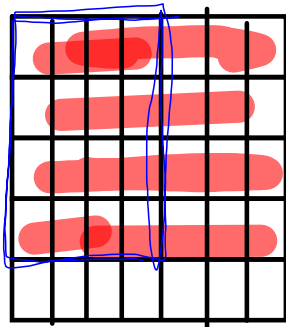
$$\frac{4}{7} \cdot 800 = \underline{457} \text{ har stemt AP}$$

$$\frac{457}{1000} = 0.457 = \underline{\underline{45,7\%}}$$

nov. 28-12.51

$$\frac{4}{7} \cdot \frac{4}{5} = \frac{16}{35} = \underline{\underline{0,457}}$$

\nearrow
 \uparrow
 80% slomme bereklige
 A, de slommen $\frac{4}{7}$ AP



$$\frac{16}{35} = \underline{\underline{0,457}}$$

nov. 28-12.56