

$$b) \quad 200 \text{ m/s} \cdot 3.6$$

200 meter hvert sekund

Hvor mange meter på 3600 s (1 time)

$$200 \cdot 3600 = 720000 \text{ m/t} = 720 \text{ km/t}$$

$$200 \cdot \frac{3600}{1000} = 200 \cdot \underline{3.6}$$

okt. 19-12.43

$$6) \quad 200 \text{ m/s} \rightarrow 3.6 \cdot 200 = \underline{\underline{720 \text{ km/t}}}$$

(jmf formelark)

$$c) \quad 80 \text{ km/t} \rightarrow \text{m/s}$$

$$\frac{80}{3.6} = 22,22$$

$$80 \text{ km/t} = 80000 \text{ m/t} = \frac{80000 \text{ m}}{3600 \text{ s}}$$

$$= \frac{80}{3.6} = 22,22 \text{ m/s}$$

$$\frac{80 \cdot 1000 \text{ m}}{3600 \text{ s}}$$

$$\frac{1000}{3600} = \frac{1}{3.6}$$

okt. 19-12.32

d) Et fat koste 50,-
 et fat 159 liter
 en dollar 8 kr

pris per liter
 i kroner

Et fat koster $50 \cdot 8 = 400$ kroner

e) En liter koster $\frac{400}{159} = 2,52$ kroner per liter.

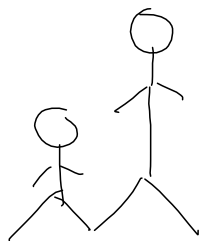
e) Arealet er 200 m^2

tykkelse er $0,25 \text{ mm} = \frac{0,25}{1000} = 0,00025 \text{ m}$

$V = 200 \cdot 0,00025 = 0,05 \text{ m}^3 = 0,05 \cdot 1000 = 50 \text{ liter}$

$1000 \text{ l} = 1 \text{ m}^3$

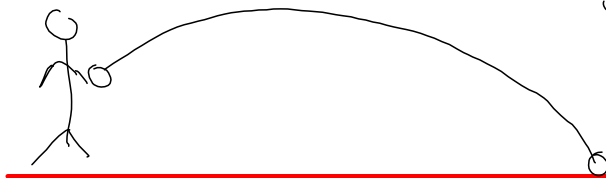
okt. 19-12.45



Kari er høyest
 Direkte sammenlikning

Oké kari

i for : 23 m
 i år : 27 m



okt. 19-12.54

b) 500 m på 37 s. c) 50 km/h

$$\frac{500}{37} = 13,51 \text{ m/s}$$

$$\frac{50 \cdot 1000}{3600} = \underline{\underline{13,89 \text{ m/s}}}$$

0,24 m/s

13,77 minutt

$$0,77 \cdot 60 = 46,2 \text{ s}$$

13:46:20

↑ ↑ ↑
min sek hundre del

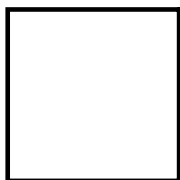
okt. 19-12.58

327 000 km²

5 mm regn

$$V = 327000000000 \cdot 0,005$$

$$= \underline{\underline{1635000000 \text{ m}^3}}$$



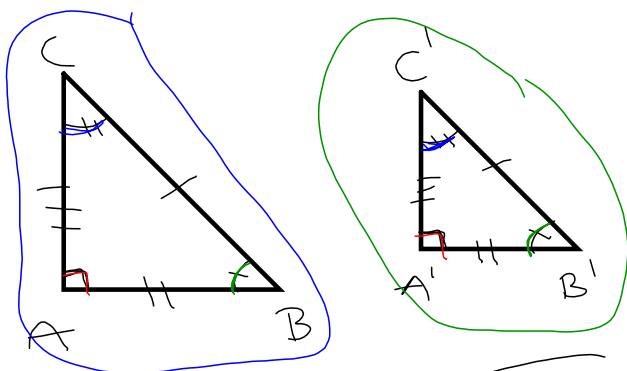
1000 m = 1 km

1000 m = 1 km

$$A = 1 \text{ km}^2 = 1000000 \text{ m}^2$$

$$5 \text{ mm} = 0,005 \text{ m}$$

okt. 19-13.07



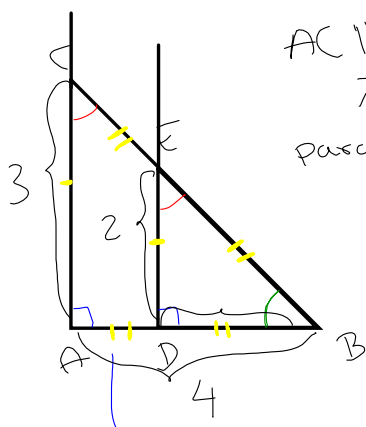
Formlikhet;
 Alle samsvarende vinkler er like store.
 Alle samsvarende sider er proporsjonale.

$\frac{A'B'}{AB} = x$

$\frac{AB}{A'B} = k$ $\frac{AC}{A'C} = k$ $\frac{BC}{B'C} = k$

$\frac{AB}{A'B} = \frac{AC}{A'C}$

okt. 19-13.20



$AC \parallel DE$
 \nearrow
 parallell

Vis at de $\triangle ABC$
 er formlike $\triangle BDE$

Vinkel B er felles $\underline{DE=ED}$

Samsvarende vinkler ved parallelle linjer er like store. $CE=ED$

samsvarende vinkler v. parallelle linjer.

$AC=3$
 $AB=4$
 $DE=2$

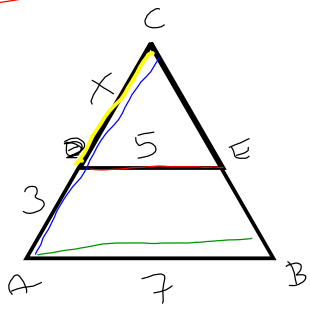
$\frac{AC}{DE} = \frac{AB}{BD}$

$\frac{3}{2} = \frac{4}{BD}$

$BD = 4 \cdot \frac{2}{3}$ $\left(\frac{4}{3}\right)$
 $BD = 8/3 = 2.66 \dots$ $\left(\frac{3}{3}\right)$

okt. 19-13.26

$ABC \sim CDE$



DC?

$$\frac{DC}{AC} = \frac{DE}{AB}$$

$$\frac{DC}{DC+3} = \frac{5}{7}$$

$$DC = \frac{5}{7} (DC+3)$$

$$7DC = 5DC + 15$$

$$7DC - 5DC = 15$$

$$2DC = 15$$

$$DC = 7,5$$

okt. 19-13.33

Oppgave 2

likebeint trekant

$$x^2 + x^2 = 5^2$$

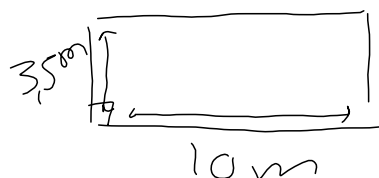
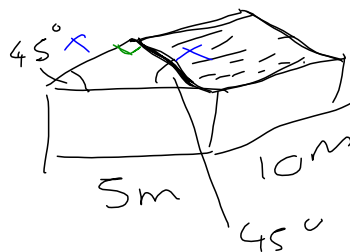
$$2x^2 = 25$$

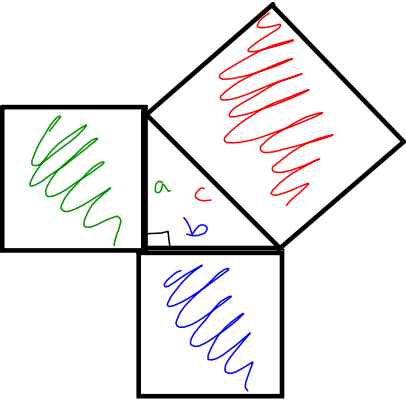
$$x^2 = 12,5$$

$$x = \sqrt{12,5} = 3,5$$

$$A_i = 3,5 \text{ m} \cdot 10 \text{ m} = 35 \text{ m}$$

$$A_{\text{total}} = 35 \text{ m} + 35 \text{ m} = 70 \text{ m}^2$$



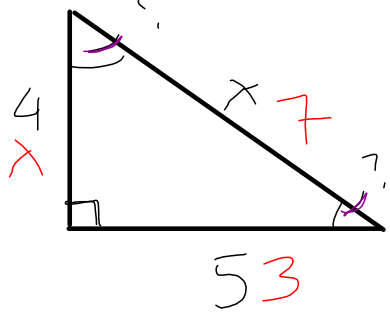


c hypotenusus
 a kateter
 b kateter

Pythagoras
 $c^2 = a^2 + b^2$ (ac)

NB! Gælder kun for retvinklede trekanter

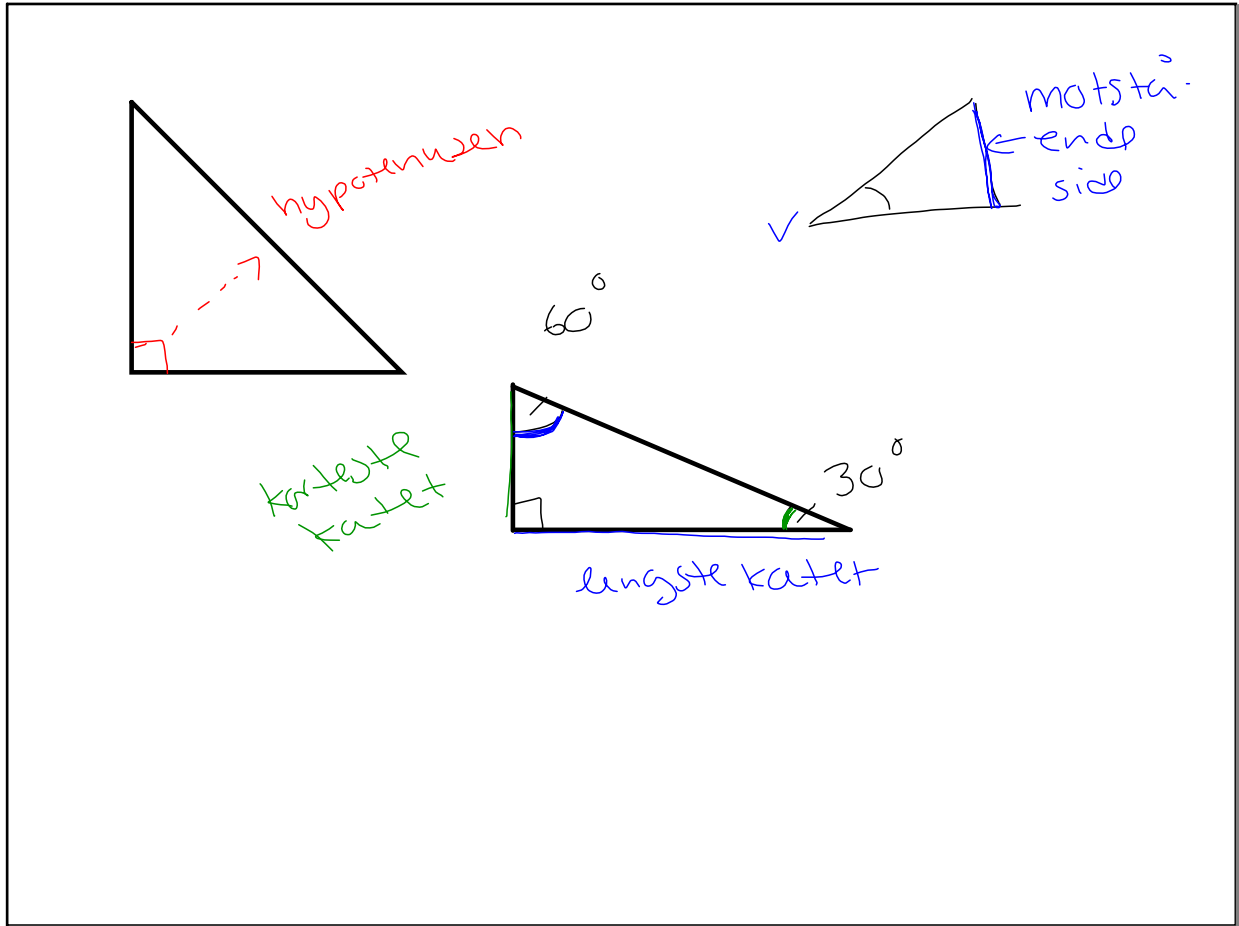
okt. 19-13.44



$x^2 = 4^2 + 5^2$
 $x^2 = 16 + 25$
 $x^2 = 41$
 $x = \sqrt{41} = \dots$

$7^2 = x^2 + 3^2$
 $x^2 = 7^2 - 3^2$ osv.

okt. 19-13.46



okt. 19-13.48

30-60-90°

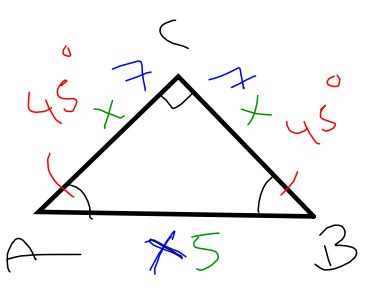
ABC er en 30-60-90°
→ trekant

Hypotenus er
dobelt så stor/lang
som minste katet.

$(2x)^2 = 2^2 x^2 = 4x^2$

$4x^2$

okt. 19-13.50

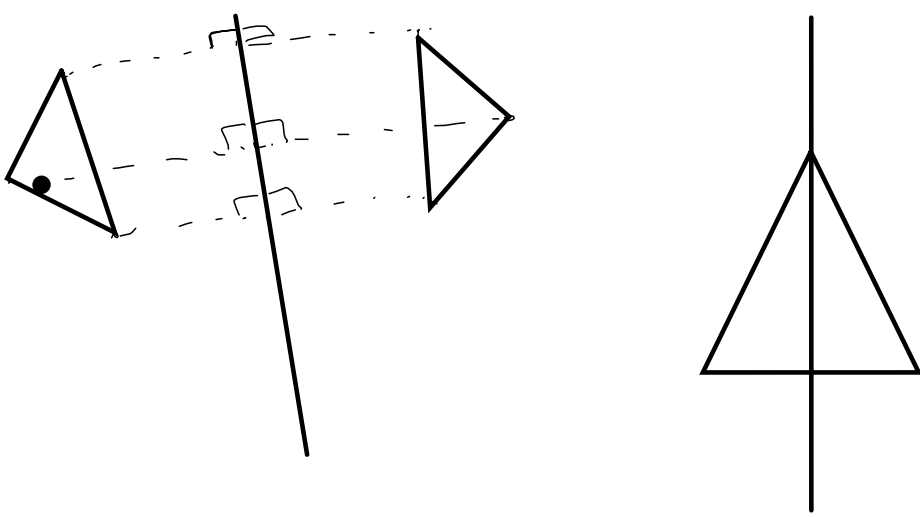


$5^2 = 2 \times 7^2 \quad (x^2 + x^2)$

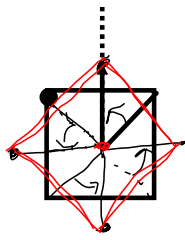
$x^2 = 7^2 + 7^2$

OSU.

okt. 19-13.54



okt. 19-13.58



Rotasjonsymetri
↳ Når vi får samme figur ved å rotere et fast antall grader.

okt. 19-13.59