



haust 2021

STÆF2RH05 - fjarnám

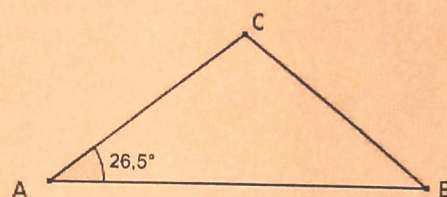
Verkefni 2

Skiladagur: 20 september 2021

1. (15%) Þríhyrningurinn $\triangle ABC$ er jafnarma. Hve stórt er hornið B?

Jafnarma = A og B jafnstór

$$A = B = 26,5^\circ$$



2. (15%) Reglulegur marghyrningur hefur hornasummuna 1440° .

Hvaða marghyrningur er þetta?

n merkir fjölda horna marghyrningsins

$$(n-2) \cdot 180^\circ = \text{hornasumma } n\text{-hyrnings}$$

$$\frac{(n-2) \cdot 180^\circ}{180^\circ} = \frac{1440^\circ}{180^\circ}$$

$$n-2 = 8$$

$$n = 8 + 2$$

$$n = 10$$

10-hyrningur

3. (10%) Hve stórt er hvert horn í marghyrningnum í spurningu 2?

$$1440^\circ / 10 = 144^\circ$$

4. (30%) Í $\triangle ABC$ er $A = 32^\circ$ og $B = 102^\circ$.

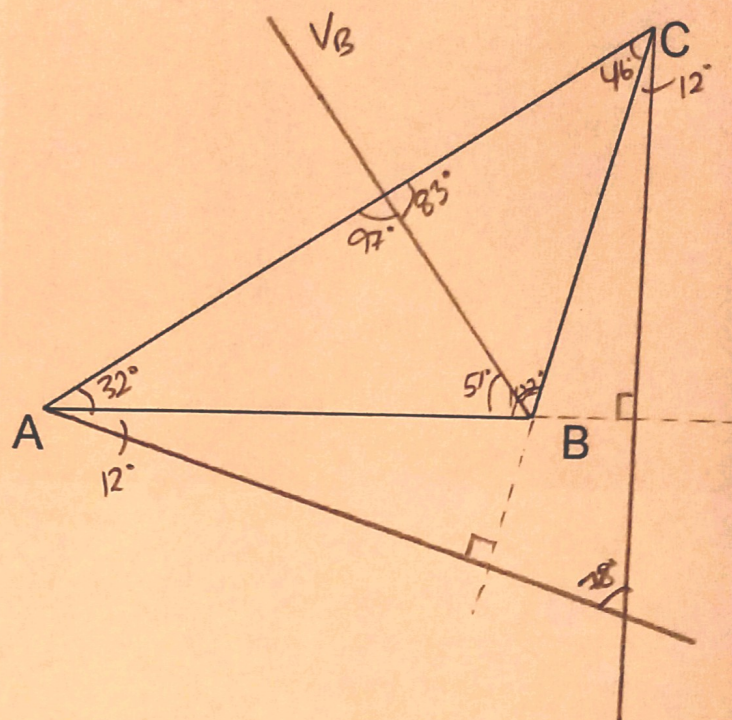
a) Teiknaðu h_a og h_c og reiknaðu hornið á milli þeirra.

$$180^\circ - 32^\circ - 102^\circ = 46^\circ$$

$$180^\circ - 32^\circ - 90^\circ - 46^\circ = 12^\circ$$

$$180^\circ - 46^\circ - 90^\circ - 32^\circ = 12^\circ$$

$$180^\circ - 32^\circ - 12^\circ - 46^\circ - 12^\circ = 78^\circ$$



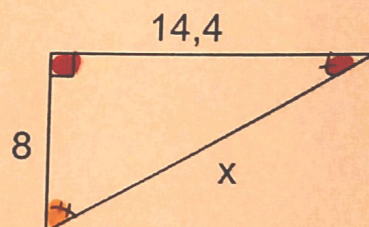
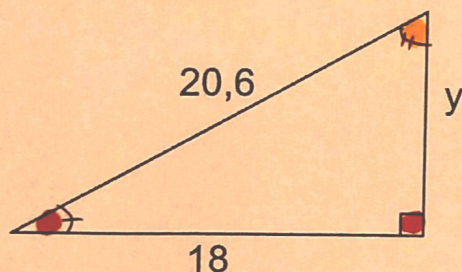
b) Finndu hornið milli V_B og b .

$$180^\circ - 32^\circ - 51^\circ = 97^\circ$$

5. (30%) Finndu

lengdirnar á

a) x -inu



$$\frac{x}{20,6} = \frac{14,4}{18}$$

$$x = \frac{14,4 \cdot 20,6}{18}$$

$$x = 16,48$$

b) y -inu

$$\frac{8}{y} = \frac{14,4}{18}$$

$$\frac{y \cdot 14,4}{14,4} = \frac{8 \cdot 18}{14,4}$$

$$y = 10$$