

Nafn: _____

Laursn

Sýndu alla útreikninga í dæmi 1 – 4.

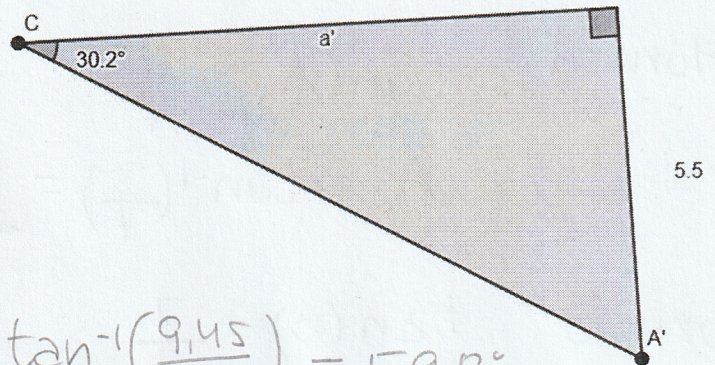
1. (25%) Finndu hvað hliðin a' er löng og hversu stórt hornið A' er með hornaföllum.

$$\frac{5,5}{a'} = \tan(30,2^\circ)$$

$$a' = \frac{5,5}{\tan(30,2^\circ)} = \underline{\underline{9,45}}$$

$$\frac{9,45}{5,5} = \tan(A')$$

$$A' = \tan^{-1}\left(\frac{9,45}{5,5}\right) = \underline{\underline{59,8^\circ}}$$



2. (25%) Finndu lengd hliðanna d og f með hornaföllum.

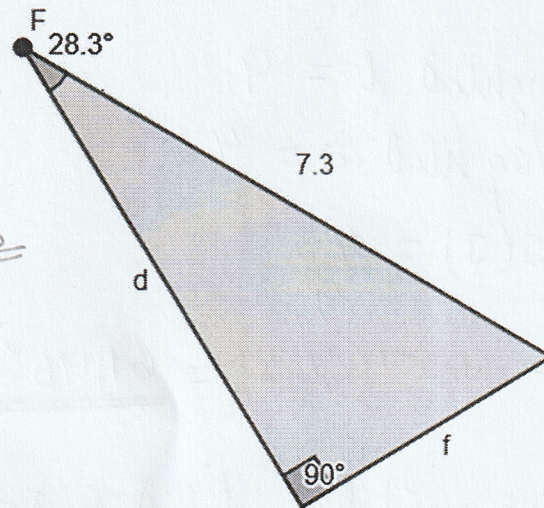
$$\frac{f}{7,3} = \sin(28,3^\circ)$$

$$f = 7,3 \cdot \sin(28,3^\circ) = \underline{\underline{3,46}}$$

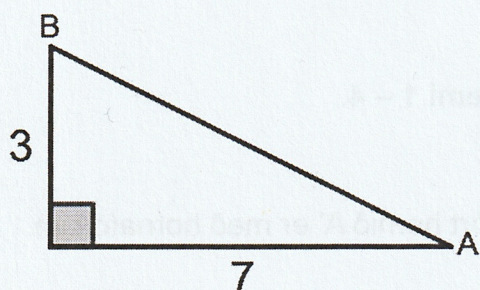
$$\frac{d}{7,3} = \cos(28,3^\circ)$$

$$d = 7,3 \cdot \cos(28,3^\circ)$$

$$d = \underline{\underline{6,43}}$$



3. (25%) Finndu stærð hornsins A og B með hornaföllum.



Horn A $\tan(A) = \frac{3}{7}$

$$A = \tan^{-1}\left(\frac{3}{7}\right) = \underline{\underline{23,20^\circ}}$$

Horn B $\tan(B) = \frac{7}{3}$

$$B = \tan^{-1}\left(\frac{7}{3}\right) = \underline{\underline{66,80^\circ}}$$

4. (25%) Finndu stærð hornsins J og lengd hliðar j með hornaföllum.

J?

Vitum langhlið $l = 9$

adlæg hlið $a = 4,3$

$$\cos(J) = \frac{4,3}{9}$$

$$J = \cos^{-1}\left(\frac{4,3}{9}\right) = \underline{\underline{61,46^\circ}}$$

Hlið j er mótlæg hlið miðað við horn J.

$$\frac{j}{4,3} = \tan(61,46^\circ)$$

$$j = 4,3 \cdot \tan(61,46^\circ) = \underline{\underline{7,91}}$$

$$\text{eða } \frac{j}{9} = \sin(61,46^\circ)$$

$$j = 9 \cdot \sin(61,46^\circ) = \underline{\underline{7,91}}$$

