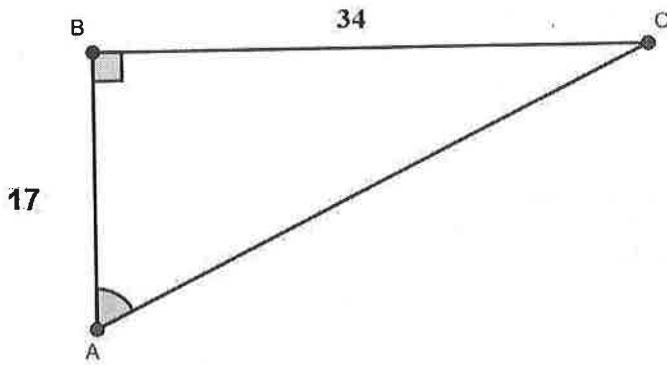


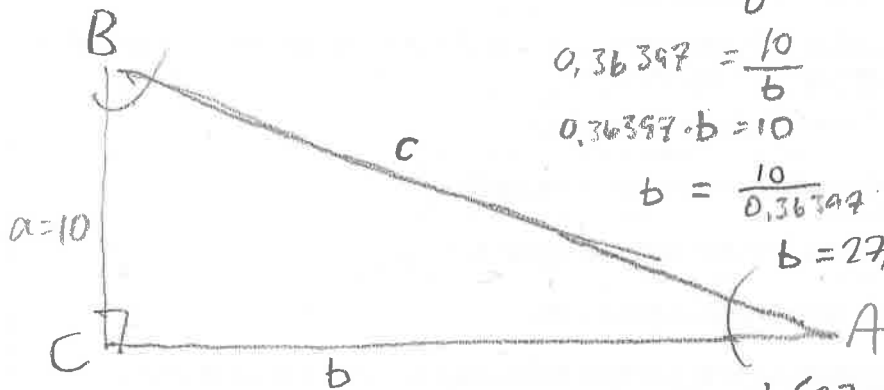
2. (10%) Reiknaðu út stærðina á horninu A í þríhyrningnum ABC.



$$\tan^{-1}(34/17) = 63,43^\circ$$

3. (30%) Þríhyrningurinn ABC er rétthyrndur og horn C = 90°.

Hornið A = 20°, hliðin a = 10. Reiknaðu hornið B, hlið c og hlið b með hornaföllum.



$$\tan(A) = \frac{a}{b}$$

$$0,36397 = \frac{10}{b}$$

$$0,36397 \cdot b = 10$$

$$b = \frac{10}{0,36397}$$

$$b = 27,47$$

$$\sin(A) = \frac{a}{c}$$

$$0,34202 = \frac{10}{c}$$

$$0,34202 \cdot c = 10$$

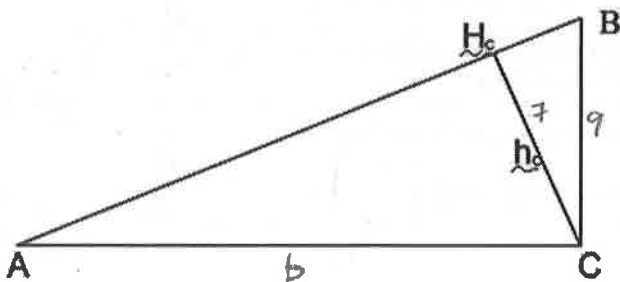
$$c = \frac{10}{0,34202}$$

$$c = 29,24$$

$$\tan^{-1}(27,47/10) = 70^\circ$$

$$B = 70^\circ$$

4. (30%) Í þríhyrningnum ABC er: C = 90°, h_c = 7 og a = 9. Reiknaðu lengdir BH_c, b og c.



$$\sin^{-1}(7/9) = 51,06$$

$$\Rightarrow B = 51,06^\circ$$

$$\Rightarrow A = 38,94^\circ$$

$$\tan(B) = \frac{b}{9}$$

$$1,2375 = \frac{b}{9}$$

$$9 \cdot 1,2375 = b$$

$$11,14 = b$$

$$\sin(B) = \frac{b}{c}$$

$$0,7778 = \frac{11,14}{c}$$

$$c \cdot 0,7778 = 11,14$$

$$c = \frac{11,14}{0,7778}$$

$$c = 14,32$$

$$\tan(B) = \frac{7}{BH_c}$$

$$1,2375 = \frac{7}{BH_c}$$

$$1,2375 \cdot BH_c = 7$$

$$BH_c = \frac{7}{1,2375}$$

$$BH_c = 5,66$$