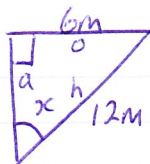


Trigonometry A : Answers

1)

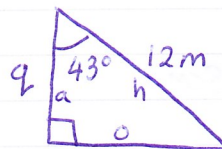


$$\sin x = \frac{o}{h}$$

$$\sin x = \frac{6}{12}$$

$$x = 30^\circ$$

2)



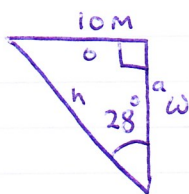
$$\cos x = \frac{a}{h}$$

$$\cos 43^\circ = \frac{a}{12}$$

$$12 \cos 43^\circ = a$$

$$8.8 \text{ m} = a$$

3)



$$\tan x = \frac{o}{a}$$

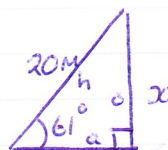
$$\tan 28^\circ = \frac{10}{w}$$

$$w \tan 28^\circ = 10$$

$$w = \frac{10}{\tan 28^\circ}$$

$$w = 18.8 \text{ m}$$

4)



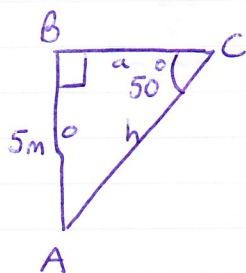
$$\sin x = \frac{o}{h}$$

$$\sin 61^\circ = \frac{x}{20}$$

$$20 \times \sin 61^\circ = x$$

$$17.5 \text{ m} = x$$

5)



$$\tan x = \frac{o}{a}$$

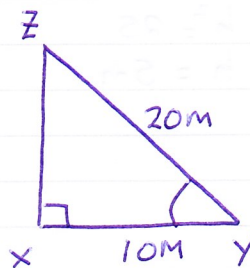
$$\tan 50^\circ = \frac{5}{BC}$$

$$BC \times \tan 50^\circ = 5$$

$$BC = \frac{5}{\tan 50^\circ}$$

$$BC = 4.2 \text{ m}$$

6)

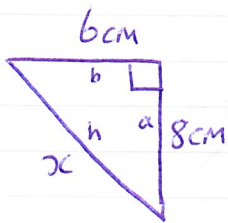


$$\cos x = \frac{a}{h}$$

$$\cos \hat{XYZ} = \frac{10}{20}$$

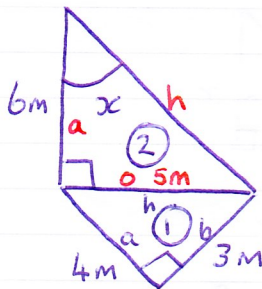
$$\hat{XYZ} = 60^\circ$$

7)



Pythag $h^2 = a^2 + b^2$
 $x^2 = 8^2 + 6^2$
 $x^2 = 64 + 36$
 $x^2 = 100$
 $x = 10\text{cm}$

8)



Triangle ①

$$h^2 = a^2 + b^2$$

$$h^2 = 4^2 + 3^2$$

$$h^2 = 16 + 9$$

$$h^2 = 25$$

$$h = 5\text{m}$$

Triangle ②

$$\tan x = \frac{a}{b}$$

$$\tan x = \frac{5}{6}$$

$$x = 39.8^\circ$$