

03/11/2020

Barry Bradshaw

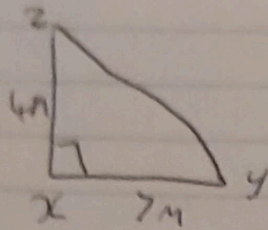
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Time 15:00

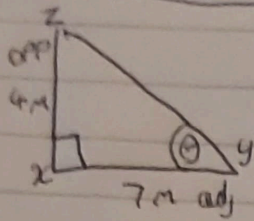
ACHA3000

7)



Soh Cah Toa

i)



$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

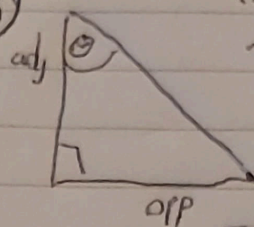
$$\theta = \tan^{-1}\left(\frac{\text{opp}}{\text{adj}}\right)$$

$$\theta = \tan^{-1}\left(\frac{4}{7}\right)$$

$$\theta = 29.74^\circ$$

$$\boxed{\theta = 29.74^\circ}$$

ii)



$$\tan \theta = \frac{\text{opp}}{\text{adj}}$$

$$\tan \theta = \frac{7}{4}$$

$$\theta = \tan^{-1}\left(\frac{7}{4}\right)$$

$$\theta = 60.26^\circ$$

$$\boxed{\theta = 60.26^\circ}$$

iii)

$$a^2 + b^2 = c^2$$

$$4^2 + 7^2 = c^2$$

$$16 + 49 = 65$$

$$\sqrt{65} = 8.062 \text{ m}$$

$$\boxed{yz = 8.062 \text{ m}}$$

8)

$$i) \sqrt[3]{x} = x^{\frac{1}{3}}$$

$$\left(\sqrt[n]{a^m}\right) = a^{\frac{m}{n}}$$

ii)

$$1 = x^0$$

$$a^0 = 1$$