

# Magic Monk Tutorials

## Trigonometry Lesson 1 worksheet - Answers

Q1. Write down the three trigonometric ratios:

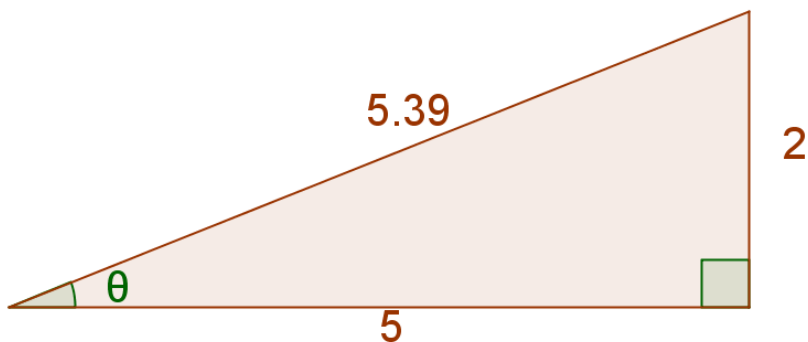
$$\sin\theta = \frac{\textit{opposite}}{\textit{hypotenuse}}$$

$$\cos\theta = \frac{\textit{adjacent}}{\textit{hypotenuse}}$$

$$\tan\theta = \frac{\textit{opposite}}{\textit{adjacent}}$$

Q2. Calculate the trigonometric ratios for the following triangles (assume all units are the same):

a)

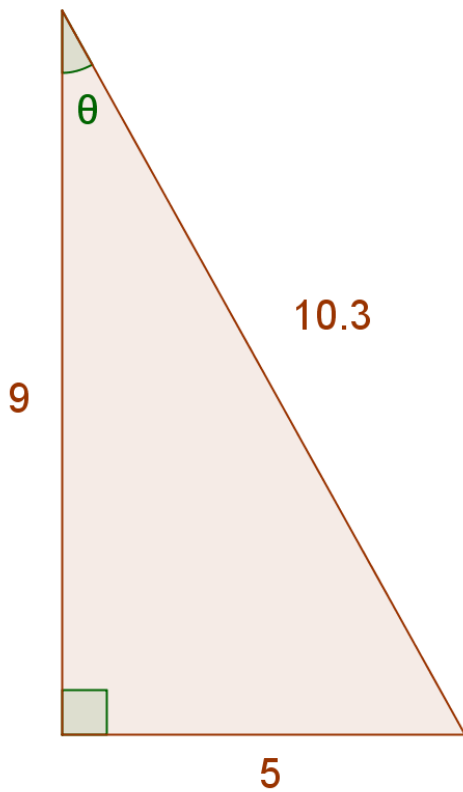


$$\sin\theta = \frac{2}{5.39} = 0.37 \text{ (2d.p.)}$$

$$\cos\theta = \frac{5}{5.39} = 0.93 \text{ (2d.p.)}$$

$$\tan\theta = \frac{2}{5} = 0.4$$

b)

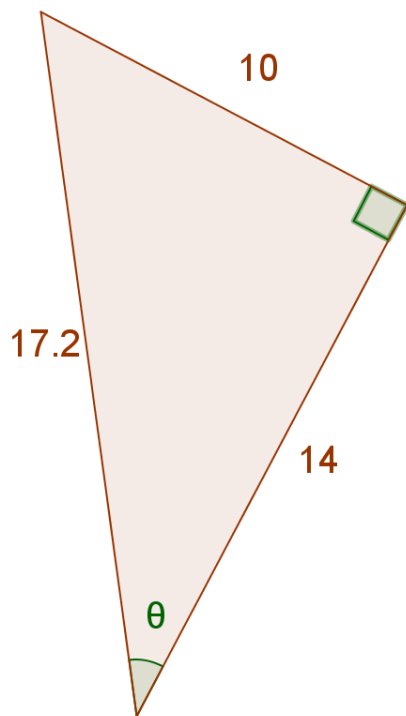


$$\sin\theta = \frac{5}{10.3} = 0.49 \text{ (2d.p.)}$$

$$\cos\theta = \frac{9}{10.3} = 0.87 \text{ (2dp)}$$

$$\tan\theta = \frac{5}{9} = 0.56 \text{ (2d.p.)}$$

c)



$$\sin\theta = \frac{10}{17.2} = 0.58 \text{ (2dp)}$$

$$\cos\theta = \frac{14}{17.2} = 0.81 \text{ (2dp)}$$

$$\tan\theta = \frac{10}{14} = 0.71 \text{ (2dp)}$$