

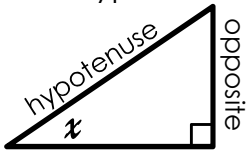
Name:

Date:

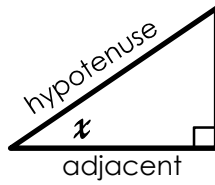
Trigonometry.

These are the three trigonometry ratios that relate angles and sides in any right-angled triangle:

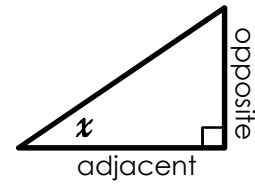
$$\sin x = \frac{\text{opposite}}{\text{hypotenuse}}$$



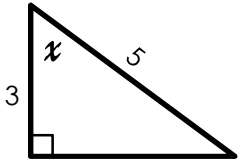
$$\cos x = \frac{\text{adjacent}}{\text{hypotenuse}}$$



$$\tan x = \frac{\text{opposite}}{\text{adjacent}}$$



Example:

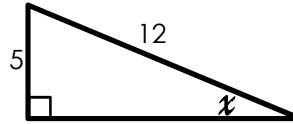


$$\cos x = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\cos x = \frac{3}{5}$$

$$x = 53^\circ$$

Example:



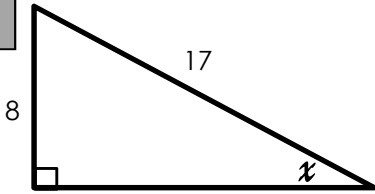
$$\sin x = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\sin x = \frac{5}{12}$$

$$x = 25^\circ$$

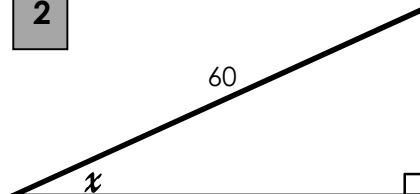
Choose one of the ratios to calculate the value of x to the nearest whole number.

1



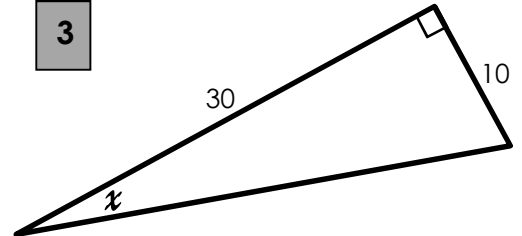
Find x

2



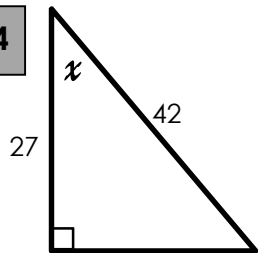
Find x

3



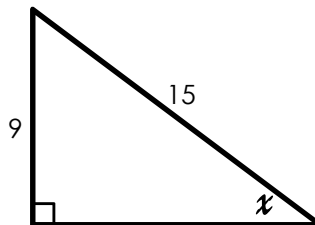
Find x

4



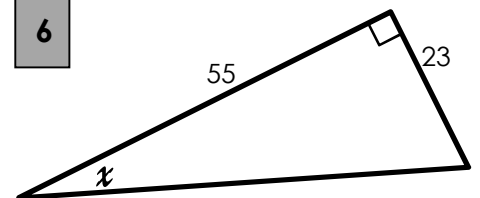
Find x

5



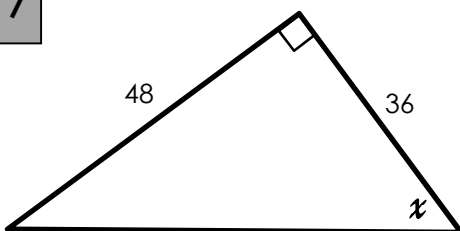
Find x

6



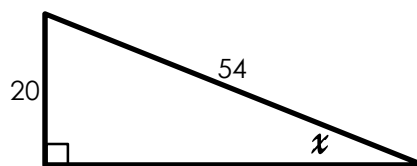
Find x

7



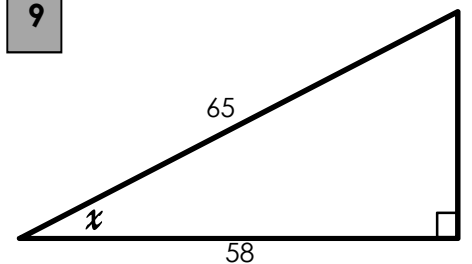
Find x

8



Find x

9



Find x

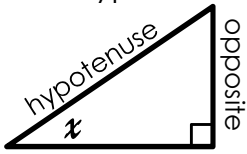
Name:

Date:

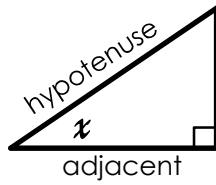
Trigonometry.

These are the three trigonometry ratios that relate angles and sides in any right-angled triangle:

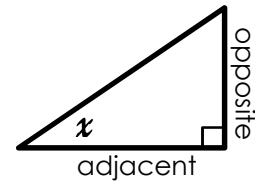
$$\sin x = \frac{\text{opposite}}{\text{hypotenuse}}$$



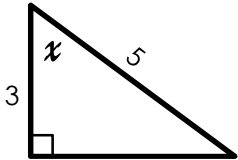
$$\cos x = \frac{\text{adjacent}}{\text{hypotenuse}}$$



$$\tan x = \frac{\text{opposite}}{\text{adjacent}}$$



Example:

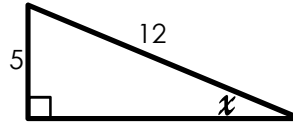


$$\cos x = \frac{\text{adjacent}}{\text{hypotenuse}}$$

$$\cos x = \frac{5}{3}$$

$$x = 53^\circ$$

Example:



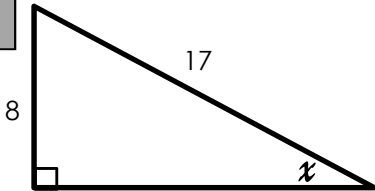
$$\sin x = \frac{\text{opposite}}{\text{hypotenuse}}$$

$$\sin x = \frac{5}{12}$$

$$x = 25^\circ$$

Choose one of the ratios to calculate the value of x to the nearest whole number.

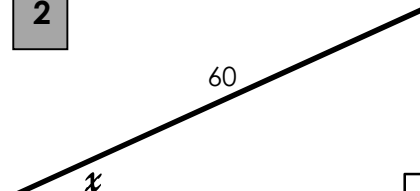
1



Find x

Use the sin ratio. $x = 28^\circ$.

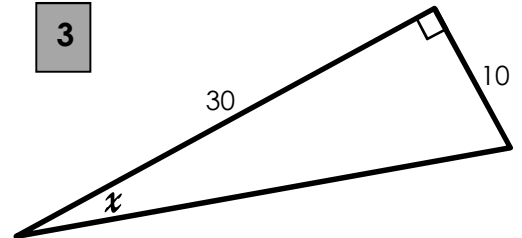
2



Find x

Use the cos ratio. $x = 24^\circ$.

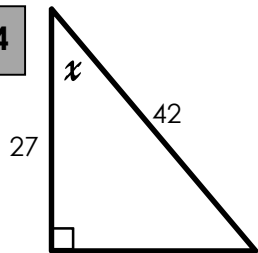
3



Find x

Use the tan ratio. $x = 18^\circ$.

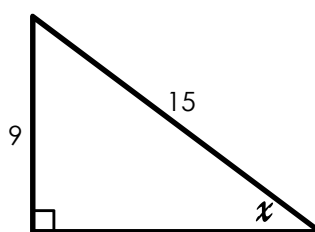
4



Find x

Use the cos ratio. $x = 50^\circ$.

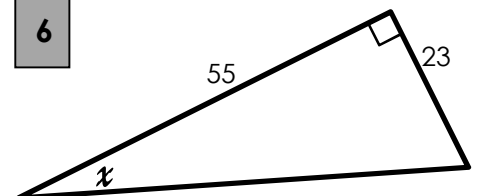
5



Find x

Use the sin ratio. $x = 37^\circ$.

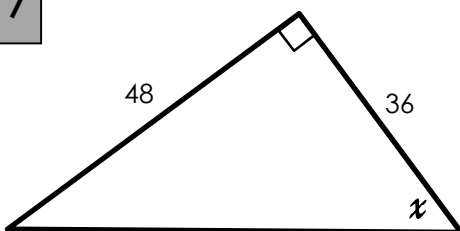
6



Find x

Use the tan ratio. $x = 23^\circ$.

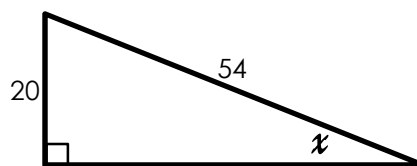
7



Find x

Use the tan ratio. $x = 53^\circ$.

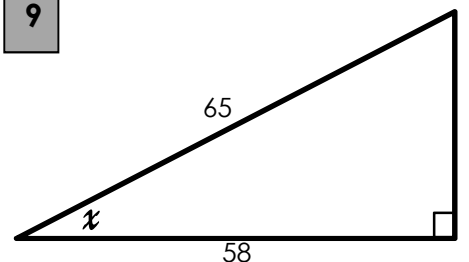
8



Find x

Use the sin ratio. $x = 22^\circ$.

9



Find x

Use the cos ratio. $x = 27^\circ$.