



Determine cosine ratios in right triangles

1

Solve for the length of line z



A $z = 5$

B $z = 4$

C $z = 13$

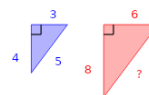
D $z = 14$

E $z = 7$

F $z = 1$

2

Find the length of the missing side given that these are similar triangles



(not to scale)

A 19

B 6

C 9

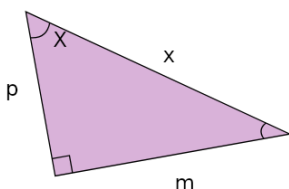
D 10

E 3

F 12

3

Which side would be the Adjacent with respect to angle 'X'?



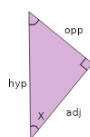
A m

B x

C p

5

In trigonometry, what's the fancy name for the ratio of the opposite side length over the adjacent side length (opp/adj)?



A Thematic

B Total

C Tangent

D Tabloid

E Thermal

F Toblerone

4

cah

A

$$\cos = \frac{\text{hyp}}{\text{opp}}$$

B

$$\tan = \text{adj} \times \text{opp}$$

C

$$\cos = \frac{\text{opp}}{\text{opp}}$$

D

$$\cos = \frac{\text{adj}}{\text{hyp}}$$

E

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

F

$$\cos = \frac{\text{adj}}{\text{adj}}$$

6

Select the trigonometry ratio that this is the definition of

$$\frac{\text{opp}}{\text{adj}}$$

A *Sine*

B *Tangent*

C *Cosine*

7

Solve for the trigonometry ratio given the values

$$\begin{aligned} \text{opp} &= 4.2 \\ \text{hyp} &= 7.3 \\ \text{adj} &= 6 \\ \sin(\beta) &= \end{aligned}$$

A $\sin(\beta) = 44.49$

B $\sin(\beta) = 0.26$

C $\sin(\beta) = 0.58$

D $\sin(\beta) = 0.89$

E $\sin(\beta) = 0.80$

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Cosine

A

$$\text{opp} \times \text{adj}$$

B

$$\text{adj} \times \text{opp}$$

C

$$\frac{\text{adj}}{\text{hyp}}$$

D

$$\text{hyp} \times \text{hyp}$$

E

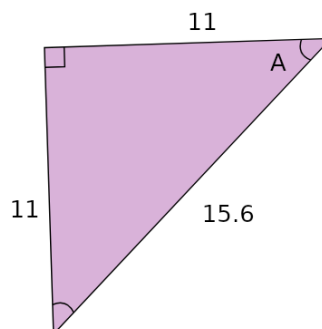
$$\text{adj} \times \text{hyp}$$

F

$$\frac{\text{opp}}{\text{hyp}}$$

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Solve for the trigonometric ratio in fraction form



A

$$\sin(A) = \frac{11}{15.6}$$

B

$$\sin(A) = \frac{15.6}{11}$$

C

$$\sin(A) = \frac{11}{11}$$

10

Solve the fraction for 'x' in terms of the variables and reduce.

$$\cos = \frac{\text{adj}}{x}$$

A

$$x = \frac{\cos}{\text{adj}}$$

B

$$x = \frac{\text{adj}}{\cos}$$

C

$$x = \cos \cdot \text{adj}$$

11

Hypotenuse

A

$$\frac{\text{opp}}{\sin}$$

B

$$\sin \times \text{adj}$$

C

$$\sin \times \text{opp}$$

D

$$\frac{\text{adj}}{\sin}$$

E

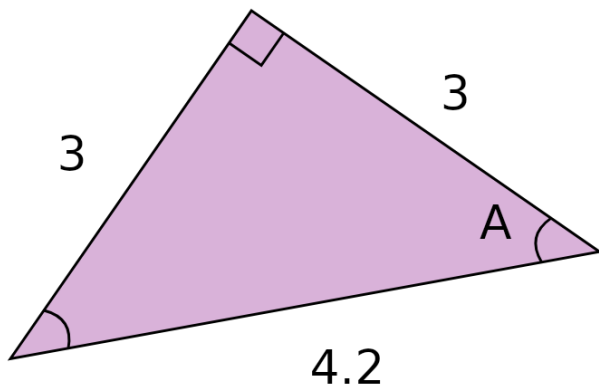
$$\frac{\sin}{\text{adj}}$$

F

$$\frac{\sin}{\text{hyp}}$$

**Determine cosine ratios in right triangles****12**

Solve for the trigonometric ratio in decimal form



A $\cos(A) = 0.71$

B $\cos(A) = 0.12$

C $\cos(A) = 1.31$

15

What angle (in degrees) has this ratio of sides?

$$\frac{\text{opp}}{\text{hyp}} = \frac{3.44}{6}$$

A 15 deg

B 40 deg

C 35 deg

D 25 deg

E 55 deg

F 50 deg

16

Calculate the angle in degrees

 α has a cos of 0.883

A $\alpha = 33^\circ$

B $\alpha = 43^\circ$

C $\alpha = 28^\circ$

D $\alpha = 23^\circ$

E $\alpha = 18^\circ$

F $\alpha = 48^\circ$

13

Solve for the side indicated

$\lambda = 55^\circ$

$\text{opp} = 11.4$

$\text{hyp} = ?$

A $\text{hyp} = 8.4$

B $\text{hyp} = 12.5$

C $\text{hyp} = 9.7$

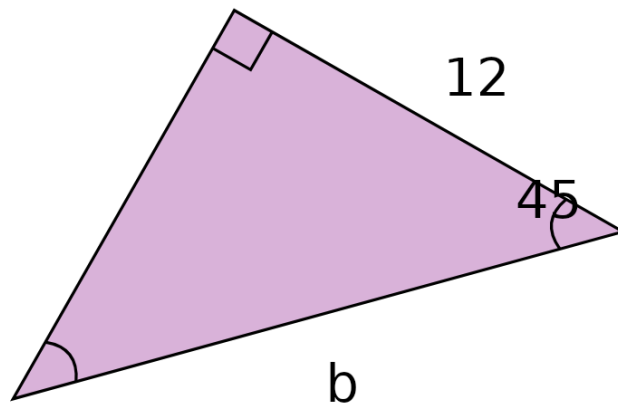
D $\text{hyp} = 19.5$

E $\text{hyp} = 15.3$

F $\text{hyp} = 13.9$

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Solve for the side length with trigonometry



A $b = 15.3$

B $b = 20.4$

C $b = 22.1$

D $b = 10.2$

E $b = 18.7$

F $b = 17.0$