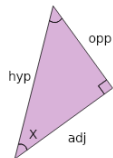




Determine sine ratios in right triangles

1

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

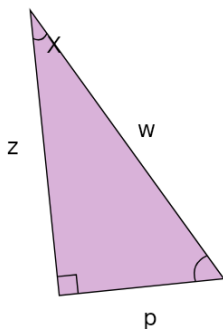


A Cosine

B Carrot

3

What would the ratio of opposite over hypotenuse be with respect to angle 'X'?

A $\frac{w}{p}$ B $\frac{p}{z}$ C $\frac{z}{p}$ D $\frac{w}{z}$ E $\frac{z}{w}$ F $\frac{p}{w}$ **5**

Using the mnemonic SOHCAHTOA, select the trigonometry ratio that this is the definition of

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

A Cosine

B Tangent

C Sine

2

toa

A

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

B

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

C

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

D

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

E

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

F

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

4

Sine

A

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

B

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

C

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

D

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

E

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

F

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

**Determine sine ratios in right triangles****6**

Cosine

A

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

B

$$opp \times opp$$

C

$$\frac{adj}{adj}$$

D

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

E

$$opp \times adj$$

F

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

9

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

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

A

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

B

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

C

$$x = \tan \cdot adj$$

7

Select the trigonometry ratio that this is the definition of

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

A

Tangent

B

Sine

C

*Cosine***8**

Select the definition of this side in terms of Tangent

What is opp?

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

A

$$\frac{hyp}{\tan}$$

B

$$\frac{adj}{\tan}$$

C

$$\tan \times adj$$

D

$$\tan \times opp$$

E

$$\frac{\tan}{adj}$$

F

$$\tan \times hyp$$

10

Solve for the trigonometry ratio given the values

$$\begin{aligned} opp &= 9.5 \\ hyp &= 12.4 \\ adj &= 8 \\ \tan(\sigma) &= \end{aligned}$$

A

$$\tan(\sigma) = 1.19$$

B

$$\tan(\sigma) = 0.50$$

C

$$\tan(\sigma) = 1.76$$

D

$$\tan(\sigma) = 0.65$$

E

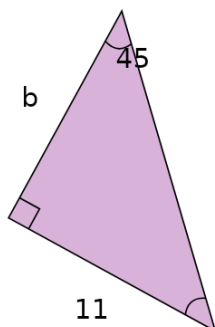
$$\tan(\sigma) = 99.20$$



Determine sine ratios in right triangles

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Solve for the side length in decimal form by calculating the trigonometric ratio



- | | |
|--------------------------|---------------------------|
| A $b = 1.00 \times 15.6$ | B $b = \frac{15.6}{1.00}$ |
| C $b = \frac{11}{1.00}$ | D $b = \frac{1.00}{15.6}$ |
| E $b = \frac{1.00}{11}$ | F $b = 1.00 \times 11$ |

12

Solve for the side indicated

$$\beta = 45^\circ$$

$$adj = 9$$

$$hyp = ?$$

- | | |
|----------------|----------------|
| A $hyp = 10.2$ | B $hyp = 12.7$ |
| C $hyp = 17.8$ | D $hyp = 16.5$ |
| E $hyp = 8.9$ | F $hyp = 7.6$ |

13

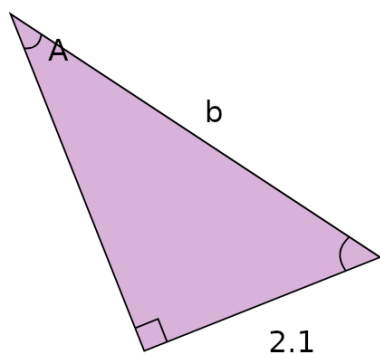
What angle (in degrees) has this ratio of sides?

$$\frac{opp}{adj} = 2.747$$

- | | |
|----------|----------|
| A 85 deg | B 70 deg |
| C 65 deg | D 80 deg |
| E 75 deg | F 90 deg |

14

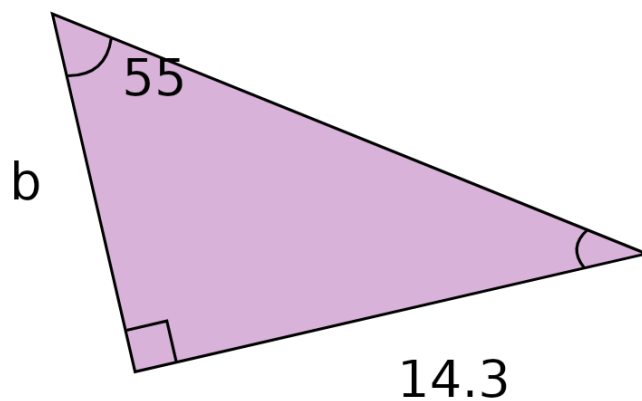
Solve for the side length in ratio form



- | |
|-----------------------------|
| A $b = \frac{2.1}{\sin(A)}$ |
| B $b = \frac{\sin(A)}{2.1}$ |

15

Solve for the side length with trigonometry



- | | |
|--------------|--------------|
| A $b = 10.0$ | B $b = 12.0$ |
| C $b = 9.0$ | D $b = 8.0$ |
| E $b = 14.0$ | F $b = 7.0$ |