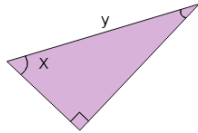




Determine tangent ratios in right triangles

1

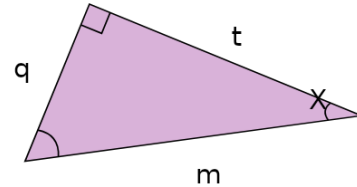
In trigonometry, what's the fancy name for the side labeled 'y' that across from the right angle?



- | | | |
|--------------|------------|-------------|
| A Holstered | B Hardened | C Hypocrisy |
| D Hypotenuse | E Hoisted | F Halberd |

2

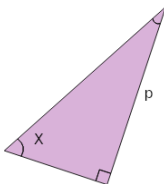
Which side would be the Hypotenuse with respect to angle 'X'?



- | | | |
|-----|-----|-----|
| A t | B q | C m |
|-----|-----|-----|

3

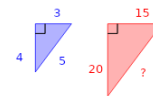
Name the side labeled 'p' with respect to angle 'X'.



- | | | |
|------------|--------------|------------|
| A Opposite | B Hypotenuse | C Adjacent |
|------------|--------------|------------|

4

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



(not to scale)

- | | | |
|------|------|------|
| A 41 | B 31 | C 17 |
| D 11 | E 25 | F 21 |

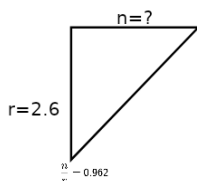
5

Adjacent

- | | |
|----------------------|----------------------|
| A $\cos \times hyp$ | B $\frac{\cos}{adj}$ |
| C $\cos \times opp$ | D $\cos \times adj$ |
| E $\frac{\cos}{hyp}$ | F $\frac{\cos}{opp}$ |

7

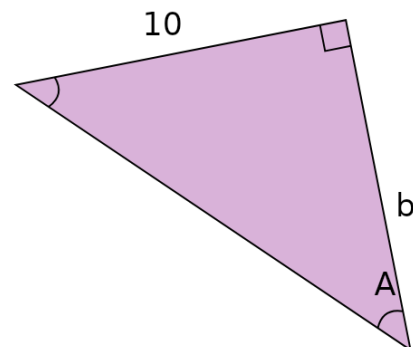
Solve for the length of line n



- | | | |
|-----------|-----------|-----------|
| A n = 1.7 | B n = 2.5 | C n = 3.3 |
| D n = 2.2 | E n = 3.2 | F n = 2.9 |

6

Solve for the side length in ratio form



A

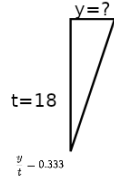
$$b = \frac{\tan(A)}{10}$$

B

$$b = \frac{10}{\tan(A)}$$

**Determine tangent ratios in right triangles****8**

Solve for the length of line y



A $y = 21$

B $y = 2$

C $y = 15$

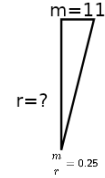
D $y = 1$

E $y = 17$

F $y = 6$

9

Solve for the length of line r



A $r = 12$

B $r = 10$

C $r = 45$

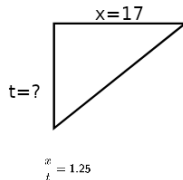
D $r = 13$

E $r = 42$

F $r = 44$

10

Solve for the length of line t



A $t = 6.0$

B $t = 15.1$

C $t = 13.6$

D $t = 11.3$

E $t = 20.8$

F $t = 16.6$

11

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

$$\frac{\text{opp}}{\text{hyp}} = \frac{5}{11.83}$$

A 5 deg

B 45 deg

C 40 deg

D 25 deg

E 10 deg

F 20 deg

12

Calculate the angle in degrees

 α has a tan of 2.904

A $\alpha = 56^\circ$

B $\alpha = 66^\circ$

C $\alpha = 76^\circ$

D $\alpha = 71^\circ$

E $\alpha = 61^\circ$

F $\alpha = 86^\circ$