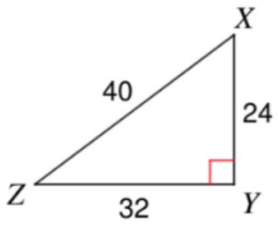
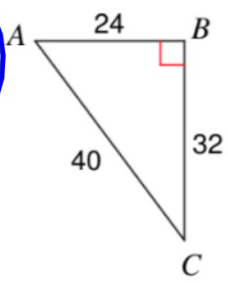
Find the tangent ratio of each angle given.

1) tan Z



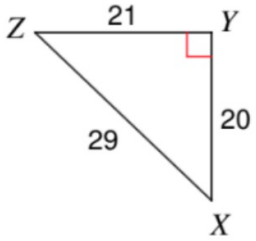
$\frac{24}{32}$ $\frac{3}{4}$

2) tan A



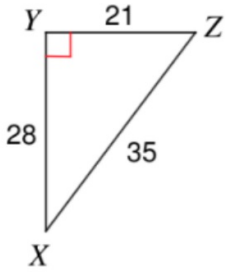
$\frac{32}{24}$ $\frac{4}{3}$

3) tan X



$\frac{21}{20}$

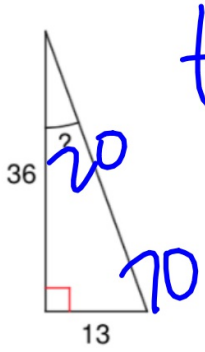
4) tan Z



$\frac{28}{21}$

Find the measure of missing angle.

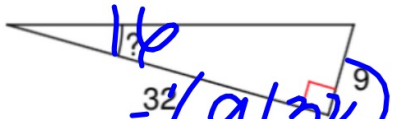
5)



$\tan^{-1}(13/36)$

$20°$

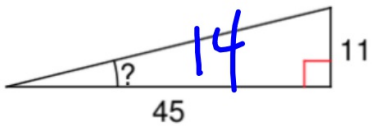
6)



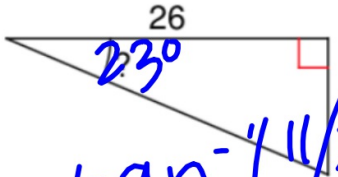
$\tan^{-1}(9/32)$

7)

$\tan^{-1}(11/45)$



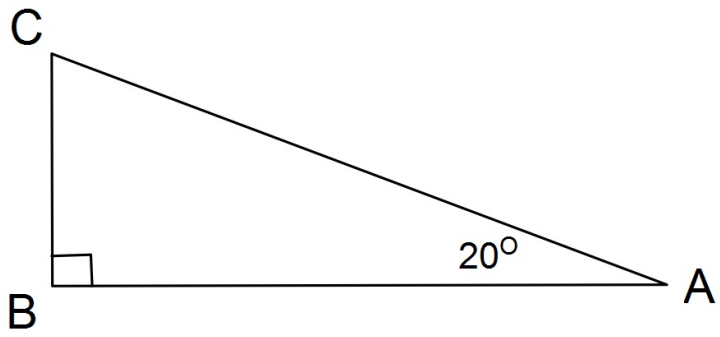
8)



$\tan^{-1}(11/26)$

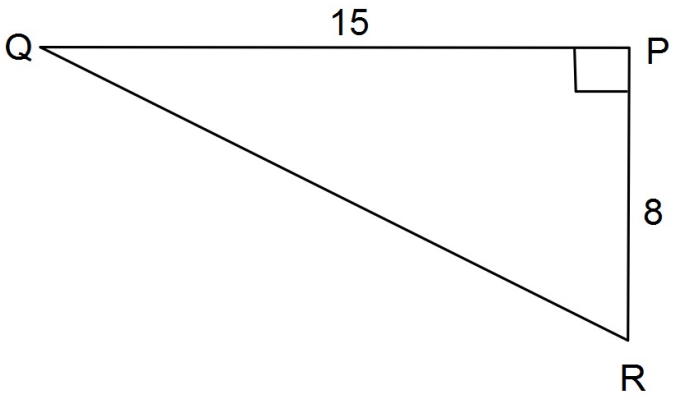
$23°$

Sec 8-3: The Tangent Ratio



$$\text{Tan}\angle A = \frac{BC}{AB} = \frac{\text{Leg opposite Angle A}}{\text{Leg adjacent to Angle A}}$$

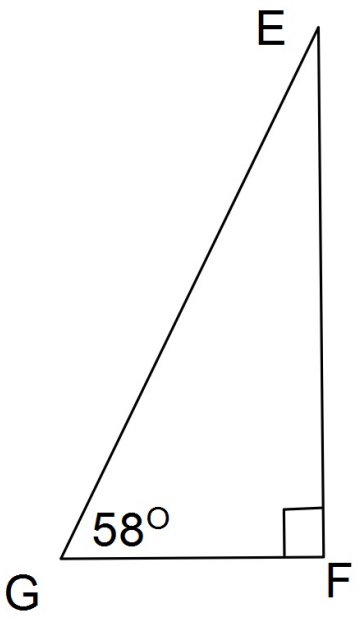
Write each as a ratio



Tan R = $\frac{15}{8}$

Tan Q = $\frac{8}{15}$

Why don't we do Tan P?



Find each to the nearest hundredth.

Tan G =

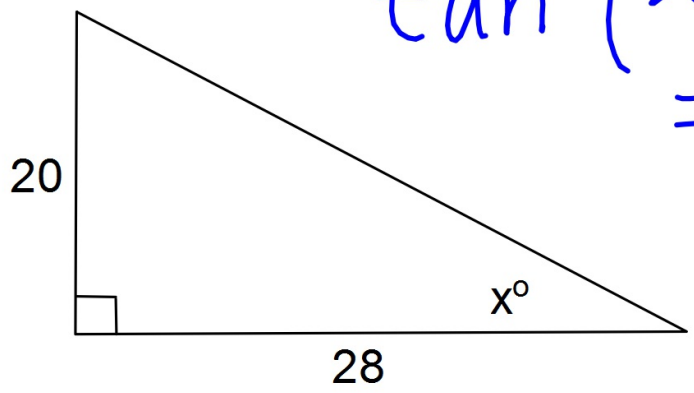
Tan E =

If TanX = 0.45 how would you find x?

$X = \tan^{-1}(0.45) = 24^{\circ}$

$\frac{45}{100}$

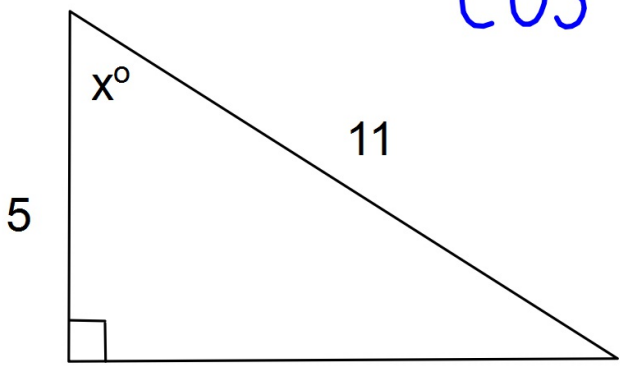
Find the value of x to the nearest tenth.



$\tan^{-1}(20/28)$

$= 36°$

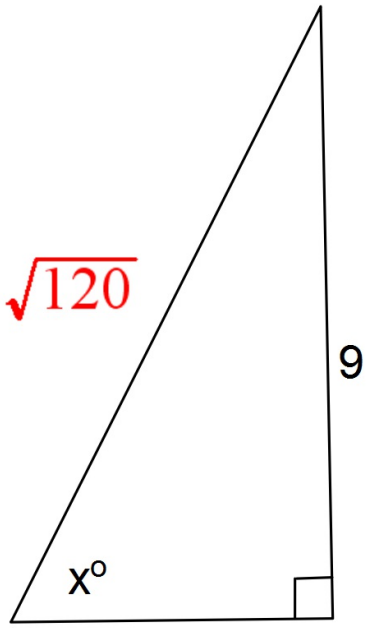
Find the value of x to the nearest tenth.



$\cos^{-1}(5/11)$

$63°$

Find the value of x to the nearest tenth.

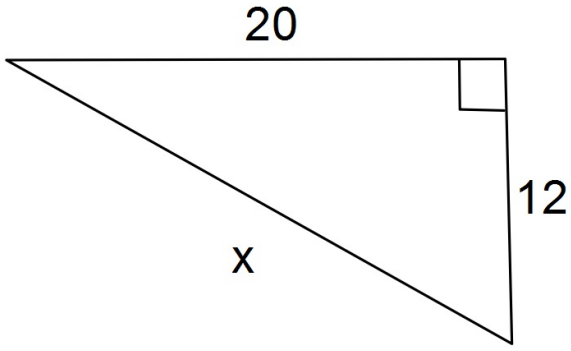


$\sin^{-1}(9/\sqrt{120})$

55°

Find the length of the third side in simplified radical form.

Quiz Review



$20^2+12^2=x^2$

$400+144=x^2$

$544=x^2$

$x=\sqrt{544}$

16 | 34

$4\sqrt{34}$

Find the third number in the Pythagorean Triple:

$c^2 = 73^2 + 55^2$

$73^2 = a^2 + 55^2$

55, 73, 48

Is each triangle Right, Acute, or Obtuse?

1. 28, 45, 53

$2809 = 2809$

right

2. 26, 32, 43

$1849 > 1700$

obtuse

Classwork:

8.1-8.2 Review Worksheet

IXL #9 - Q.1 & Q.4 due tomorrow by 4pm!