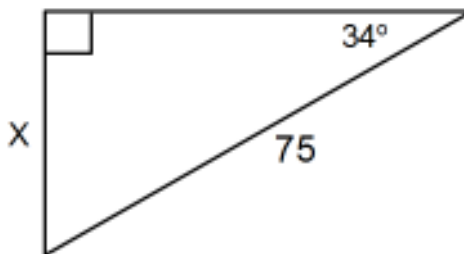


1. State the Reference Angle for the given angle which is in Standard Position: $\theta = 255^\circ$

Ref $\angle =$

2. Find the value of x to the nearest hundredth.

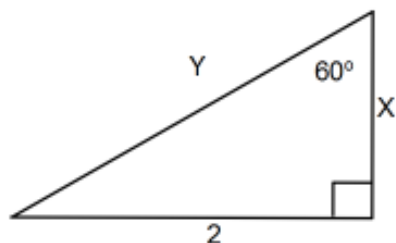
$x =$



3. Given $\theta = -1540^\circ$ find a coterminal angle such that $0^\circ \leq \theta \leq 360^\circ$

Coterminal angle between 0° and $360^\circ =$

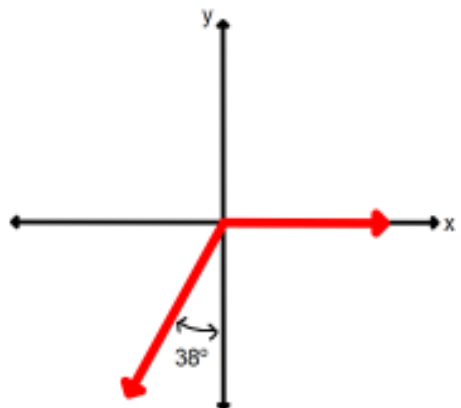
4. Find the EXACT values of x and y using the relationships in the Special Right Triangles. Simplify and rationalize denominators.



$x =$

$y =$

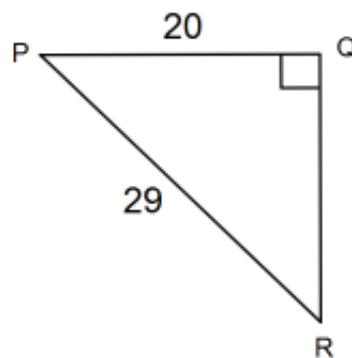
5. Give both a positive and negative measure for the angle shown in Standard Position.



Pos $\angle =$

Neg $\angle =$

6. Use $\triangle PQR$ to write all 6 trig functions as ratios.



$$\sin P =$$

$$\cot P =$$

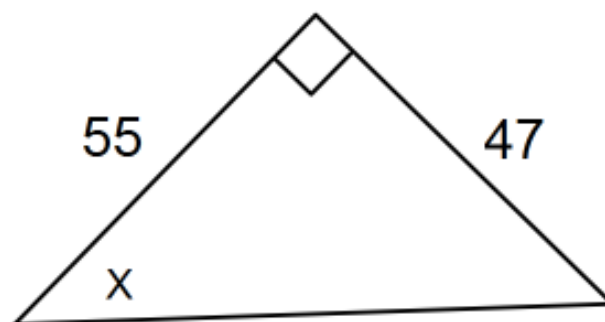
$$\sec P =$$

$$\tan P =$$

$$\cos P =$$

$$\csc P =$$

7. Find the value of x to the nearest hundredth.



$$x =$$

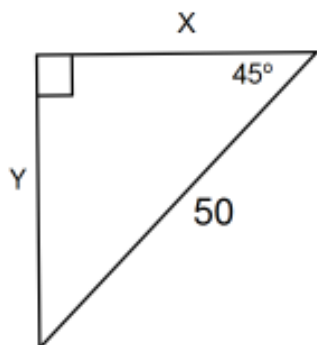
8. a) Convert to degrees. Round to the nearest hundredth.

$$\theta = \frac{11\pi}{5}$$

b) Convert to radians. Simplify fraction and leave in terms of π .

$$\theta = 315^\circ$$

9. Find the EXACT values of x and y using the relationships in the Special Right Triangles. Simplify and rationalize denominators.



$$x =$$

$$y =$$

Alg 2 Weekly Review: 4/20 to 4/23

ANSWERS

1. Ref $\angle = 255 - 180 = 75^\circ$

2. $x = 41.94$

3. 260°

4. $x = \text{SL} = \frac{\text{LL}}{\sqrt{3}} = \frac{2}{\sqrt{3}} \rightarrow \frac{2}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \boxed{\frac{2\sqrt{3}}{3}}$

$y = \text{Hypot} = \text{SL} \cdot 2 = \frac{2\sqrt{3}}{3} \cdot 2 = \boxed{\frac{4\sqrt{3}}{3}}$

5. Pos: $\theta = 270 - 38 = \boxed{232^\circ}$

Neg: $\theta = -(90 + 38) = \boxed{-128^\circ}$

6. $\sin P = \frac{21}{29}$

$\cot P = \frac{20}{21}$

$\sec P = \frac{29}{20}$

$\tan P = \frac{21}{20}$

$\cos P = \frac{20}{29}$

$\csc P = \frac{29}{21}$

7. $x = 40.52^\circ$

8. a) $\frac{11\pi}{5} \rightarrow \boxed{396^\circ}$

b) $315^\circ \rightarrow \boxed{\frac{7\pi}{4}}$

9. $s = y = \text{Leg} = \frac{\text{hypot}}{\sqrt{2}} = \frac{50}{\sqrt{2}} \rightarrow \frac{50}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} = \frac{50\sqrt{2}}{2} = \boxed{25\sqrt{2}}$