Honors Advanced Algebra   DATE: _____
## Trig Practice Quiz

1) Determine one positive and one negative angle co-terminal to $-225°$.

2) Determine one positive and one negative angle co-terminal to $\frac{5\pi}{8}$.

3) Change $320°$ to radians.

4) Change the radian measure $\frac{7\pi}{9}$ to degrees.

5) What is $\cos\theta$ for an angle θ in standard position whose terminal side contains the point (8, 15)?

Write a trig equation and solve to answer the following questions. Show all steps. Round to the nearest tenth.

6) Given $\angle B = 23°$ and b $= 12\ cm$, find the length of AB.
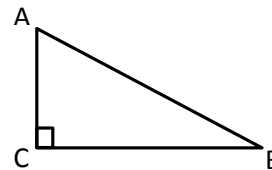
7) A ski slope at a mountain has an angle of elevation of $18°$. The height of the slope is 1808 feet. How long is the ski slope? Draw a diagram.

Write a trig equation and solve to answer the following questions. Show all steps.

8) You are standing at the end of the shadow of a giant sequoia 150 feet from its base. The angle of elevation of the sun is $43°$. How tall is the tree? Draw a diagram.

9) Round to the nearest degree. Find the value of x given: $\tan x = 0.3386$
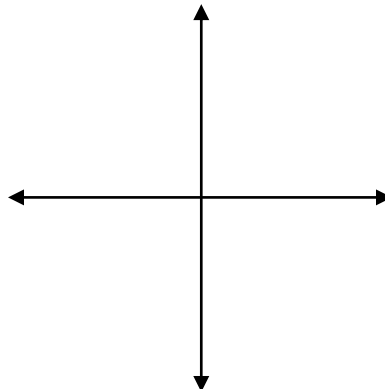
Draw an angle of rotation. State which quadrant the terminal ray lands. State the reference angle.

10)   400°
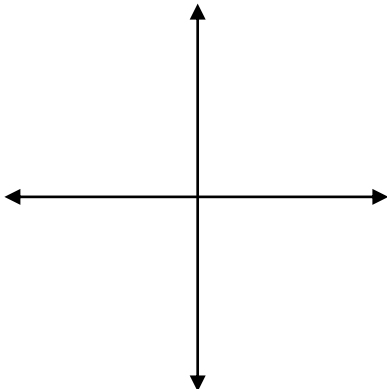
11) $\frac{-3\pi}{4}$

Leave answer in **degrees**.

Leave answer in **radians**.

12) Suppose θ is an acute angle of a right triangle. If θ is in Quadrant I and $\cos\theta = \frac{8}{17}$, find the values of the remaining five trig functions.
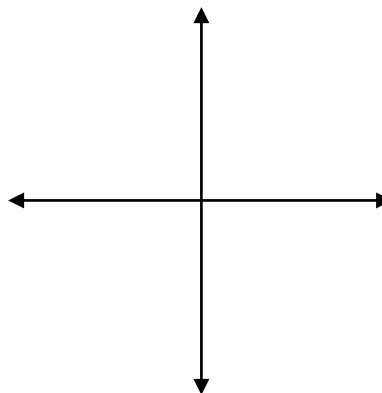
$\sin\theta = $ _____

$\tan\theta = $ _____

$\csc\theta = $ _____

$\sec\theta = $ _____

$\cot\theta = $ _____

Find the exact values of $\sin\theta$, $\cos\theta$, and $\tan\theta$ if the terminal side of θ in the standard position contains the given point. Draw and label a diagram.

13) $P(-9, -12)$

14) $P(-5, 0)$

$\sin\theta = $ _____

$\cos\theta = $ _____

$\tan\theta = $ _____

$\sin\theta = $ _____

$\cos\theta = $ _____

$\tan\theta = $ _____