## Pre-Calc. 11 LG 3A QUIZ (Formative Assessment)

## Marking Teacher:

$\qquad$ Name: $\qquad$

## Student \#:

1. Draw each angle in standard position, state the reference angle, and determine the quadrant the terminal arm lies in.
a) $125^{\circ}$
b) $300^{\circ}$
c) $245^{\circ}$


Ref. $\angle$ $\qquad$

Ref. $\angle$ $\qquad$

Quad. $\qquad$
Quad. $\qquad$

Ref. $\angle$ $\qquad$ Quad. $\qquad$
2. For the reference angle $65^{\circ}$, determine three other angles in standard position, $0^{\circ}<\theta<360^{\circ}$.
3. Give the exact values for each.
a) $\operatorname{Cos} 30^{\circ}$
b) $\operatorname{Tan} 45^{\circ}$
4. A 6-m ramp is used for bike jumping. Determine the exact height of the jump if the angle of the ramp is $60^{\circ}$.
5. Express the direction $\mathrm{S} 40^{\circ} \mathrm{E}$ in standard position.
6. Draw an angle in standard position so that the terminal arm passes through each point. Then write the exact trigonometric ratios for $\operatorname{Sin} \theta, \operatorname{Cos} \theta$, and $\operatorname{Tan} \theta$.
a) $(6,-8)$
b) $(-5,12)$

$\operatorname{Sin} \theta$ $\qquad$ $\operatorname{Sin} \theta$ $\qquad$
$\operatorname{Cos} \theta$ $\qquad$ $\operatorname{Cos} \theta$ $\qquad$
Tan $\theta$ $\qquad$ Tan $\theta$ $\qquad$
7. For the description $\operatorname{Sin} \theta<0$ and $\operatorname{Tan} \theta>0$, in which quadrant does the terminal arm of angle $\theta$ lie?
8. $\operatorname{Sin} 90^{\circ}=$ $\qquad$ $\operatorname{Cos} 180^{\circ}=$ $\qquad$ $\operatorname{Tan} 270^{\circ}=$ $\qquad$

The point $\mathrm{P}(k, 16)$ is 20 units from the origin. If P lies on the terminal arm of an angle, $\theta$, in standard position, $0^{\circ}<\theta<360^{\circ}$, determine the following.
9. The measure of $\theta$.
10. Determine the sine, cosine, and tangent ratio for $\theta$.

## Pre-Calc. 11 LG 3B QUIZ (Formative Assessment)

Marking Teacher: $\qquad$ Name:

## Student \#:

2. Draw each angle in standard position, state the reference angle, and determine the quadrant the terminal arm lies in.
a) $85^{\circ}$
b) $330^{\circ}$
c) $215^{\circ}$


Ref. $\angle$ $\qquad$
Quad. $\qquad$


Ref. $\angle$ $\qquad$
Quad. $\qquad$


Ref. $\angle$ $\qquad$
Quad. $\qquad$
2. For the reference angle $25^{\circ}$, determine three other angles in standard position, $0^{\circ}<\theta<360^{\circ}$.
3. Give the exact values for each.
a) $\operatorname{Cos} 60^{\circ}$
b) $\operatorname{Sin} 45^{\circ}$
4. A $8-\mathrm{m}$ ramp is used for bike jumping. Determine the exact height of the jump if the angle of the ramp is $30^{\circ}$.
5. Express the direction $\mathrm{N} 50^{\circ} \mathrm{E}$ in standard position.
7. Draw an angle in standard position so that the terminal arm passes through each point. Then write the exact trigonometric ratios for $\operatorname{Sin} \theta, \operatorname{Cos} \theta$, and $\operatorname{Tan} \theta$.
a) $(-12,-16)$
b) $(-1,1)$

$\operatorname{Sin} \theta$ $\qquad$

$\qquad$
Sin $\theta$ $\qquad$
$\operatorname{Cos} \theta$
$\operatorname{Cos} \theta$ $\qquad$
Tan $\theta$ $\qquad$ Tan $\theta$ $\qquad$
7. For the description $\operatorname{Sin} \theta>0$ and $\operatorname{Cos} \theta>0$, in which quadrant does the terminal arm of angle $\theta$ lie?
8. $\operatorname{Sin} 0^{\circ}=$ $\qquad$ $\operatorname{Cos} 90^{\circ}=$ $\qquad$ $\operatorname{Tan} 180^{\circ}=$ $\qquad$

The point $\mathrm{P}(8, k)$ is 12 units from the origin. If P lies on the terminal arm of an angle, $\theta$, in standard position, $0^{\circ}<\theta<360^{\circ}$, determine the following.
11. The measure of $\theta$.
12. Determine the sine, cosine, and tangent ratio for $\theta$.

