## Module 17 Review and Concepts

1. Given the following triangle. Find $\tan \theta=$


Given $\tan \theta=\frac{4}{3}$, find the following trig ratios:
2. $\cos \theta=$
3. $\csc \theta=$
4. The angle of depression of the sun is $28^{\circ}$ when a building casts a shadow 30 feet long.

Set up a trig equation to solve for the height of the building based on the given information.

Name a positive and negative angle that is co-terminal to the given:
5. $\frac{\pi}{4}$
6. $200^{\circ}$

What is the reference angle for the following?
7. $220^{\circ}$
8. $\frac{7 \pi}{4}$

Convert the following from degrees to radians or from radians to degrees:
9. $100^{\circ}$
10. $\frac{2 \pi}{15}$

Identify the following trig function values:

| 11. $\cot 330^{\circ}=$ | $12 \cdot \sec -120^{\circ}=$ |
| :--- | :--- |
| $13 \cdot \sec \frac{3 \pi}{4}=$ | 14. $\tan \frac{4 \pi}{3}=$ |
| $15 \cdot \sin 45^{\circ} \cos 150^{\circ}$ | 16. $\tan \frac{5 \pi}{3} \cot \frac{2 \pi}{3}$ |

## Graph The following:

5. $y=4 \cos 2\left(x+\frac{\pi}{6}\right)-2$
6. $y=-5 \sin \left(x+\frac{\pi}{12}\right)$
7. $y=3 \cos \left(3 x+\frac{\pi}{6}\right)$

Write a sine and a cosine equation of the following graphs

22. Be able to solve Trig Equations.

