Name:

Practice:
Trig for Any Angle or Radius

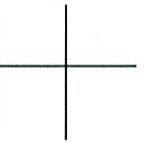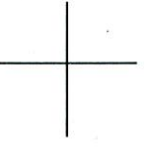Evaluate the function given a point on the terminal side of the angle. Simplify completely and rationalize when needed.
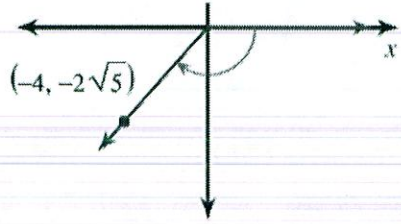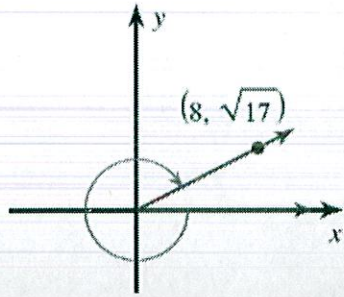
1. Find $\csc\theta$, when the terminal side of θ passes through $(4,3)$.	2. Find $\sec\theta$, when the terminal side of θ passes through $(-8,15)$.	3. Find $\tan\theta$, when the terminal side of θ passes through $(-12,-5)$.

5. Find $\sin\theta$, when the terminal side of θ passes through $(1,-1)$.	6. Find $\cos\theta$, when the terminal side of θ passes through $(-\sqrt{3},-1)$.	7. Find $\cot\theta$, when the terminal side of θ passes through $(4,-4)$.
The $m\angle\theta =$ _____ (in radians)	The $m\angle\theta =$ _____ (in degrees)	The $m\angle\theta =$ _____ (in radians)

Determine the quadrant in which the terminal side of the angle, θ, lies.

9. $\csc\theta < 0$ and $\cos\theta > 0$	10. $\tan\theta > 0$ and $\cos\theta < 0$	11. $\sin\theta > 0$ and $\cos\theta < 0$	12. $\sec\theta > 0$ and $\cot\theta > 0$

Find the exact value of the function given the graph. Simplify completely and rationalize when needed.

13. $\sin\theta =$	14. $\cos\theta =$
$(-4, -2\sqrt{5})$	$(8, \sqrt{17})$

Find the indicated trig ratio in the specified quadrant. Simplify completely and rationalize when needed.

15. $\sin\theta = -\frac{3}{5}$ and θ is in Q4. Find $\cos\theta$.	16. $\cos\theta = \frac{7}{25}$ and θ is in Q1. Find $\csc\theta$.	17. $\sec\theta = -\frac{9}{4}$ and θ is in Q3. Find $\tan\theta$.
18. $\csc\theta = -2$ and $\sec\theta > 0$. Find $\cot\theta$.	19. $\tan\theta = \frac{3}{2}$ and $\sin\theta < 0$. Find $\sec\theta$.	20. $\cot\theta = -3$ and $\cos\theta < 0$. Find $\sin\theta$.