Math 3 Name_____



# PRACTICE Quiz 1.3-1.4 Trigonometric Functions of Acute Angles

**Use identities to find the value of each expression.**

1) Find $\cot\theta$ and $\sin\theta$ if $\csc\theta = -\frac{8}{5}$ and $\tan\theta < 0$.

2) Find $\sin\theta$ and $\sec\theta$ if $\tan\theta = -4$ and $\cos\theta > 0$.

3) Find $\csc\theta$ and $\tan\theta$ if $\sin\theta = -\frac{5}{6}$ and $\cot\theta < 0$.

4) Find $\sec\theta$ and $\cot\theta$ if $\csc\theta = 2$ and $\tan\theta > 0$.

**In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.**

5) Find $\tan A$ if $b = 8,\ c = 10$

6) Find $\cot A$ if $c = 5\sqrt{2},\ a = 5$

7) Find $\sin A$ if $a = 15,\ c = 17$

8) Find $\cos A$ if $a = 8,\ b = 6$

Math 3 Name_____



# PRACTICE Quiz 1.3-1.4 Trigonometric Functions of Acute Angles

**Use identities to find the value of each expression.**

1) Find $\cot\theta$ and $\sin\theta$ if $\csc\theta = -\frac{8}{5}$ and $\tan\theta < 0$.

$-\frac{\sqrt{39}}{5}$ and $-\frac{5}{8}$

2) Find $\sin\theta$ and $\sec\theta$ if $\tan\theta = -4$ and $\cos\theta > 0$.

$-\frac{4\sqrt{17}}{17}$ and $\sqrt{17}$

3) Find $\csc\theta$ and $\tan\theta$ if $\sin\theta = -\frac{5}{6}$ and $\cot\theta < 0$.

$-\frac{6}{5}$ and $-\frac{5\sqrt{11}}{11}$

4) Find $\sec\theta$ and $\cot\theta$ if $\csc\theta = 2$ and $\tan\theta > 0$.

$\frac{2\sqrt{3}}{3}$ and $\sqrt{3}$

**In each triangle ABC, angle C is a right angle. Find the value of the trig function indicated.**

5) Find $\tan A$ if $b = 8,\ c = 10$

$\frac{3}{4}$

6) Find $\cot A$ if $c = 5\sqrt{2},\ a = 5$

1

7) Find $\sin A$ if $a = 15,\ c = 17$

$\frac{15}{17}$

8) Find $\cos A$ if $a = 8,\ b = 6$

$\frac{3}{5}$