SATPREP Name_____

Assignment : Trigonometrc Ratio

Date_____

Use identities to find the value of each expression.

1) Find sec θ and tan θ
if $\sin\theta = -\frac{1}{2}$ and $\cos\theta < 0$.

2) Find cos θ and sec θ
if $\tan\theta = \frac{8}{5}$ and $\cos\theta < 0$.

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

4) Find tan θ and cos θ
if $\cot\theta = \frac{3}{2}$ and $\sin\theta < 0$.

5) Find csc θ and sec θ
if $\tan\theta = -5$ and $\csc\theta > 0$.

6) Find csc θ and sin θ
if $\cot\theta = -\frac{1}{2}$ and $\cos\theta < 0$.

7) Find csc θ and cot θ
if $\tan\theta = \frac{1}{2}$ and $\sin\theta > 0$.

8) Find sin θ and sec θ
if $\csc\theta = 2$ and $\cot\theta < 0$.

9) Find cot θ and cos θ
if $\sin\theta = \frac{1}{3}$ and $\cot\theta < 0$.

10) Find cot θ and cos θ
if $\tan\theta = \frac{4}{7}$ and $\csc\theta < 0$.

Answers to Assignment : Trigonometrc Ratio

1) $-\frac{2\sqrt{3}}{3}$ and $\frac{\sqrt{3}}{3}$

2) $-\frac{5\sqrt{89}}{89}$ and $-\frac{\sqrt{89}}{5}$

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

4) $\frac{2}{3}$ and $-\frac{3\sqrt{13}}{13}$

5) $\frac{\sqrt{26}}{5}$ and $-\sqrt{26}$

6) $\frac{\sqrt{5}}{2}$ and $\frac{2\sqrt{5}}{5}$

7) $\sqrt{5}$ and 2

8) $\frac{1}{2}$ and $-\frac{2\sqrt{3}}{3}$

9) $-2\sqrt{2}$ and $-\frac{2\sqrt{2}}{3}$

10) $\frac{7}{4}$ and $-\frac{7\sqrt{65}}{65}$