Algebra 2 Bellwork Tuesday, March 10, 2015

Use the given infomation to find the measure of all the anlges θ that meet each condition. ($0° \leq \theta \leq 360°$)

1. $\text{Cos}\theta = \frac{\sqrt{2}}{2}$
2. $\text{Sin}\theta = -1$
3. $\text{Tan}\theta = \sqrt{3}$
4. $\text{Cos}\theta = -\frac{\sqrt{3}}{2}$
5. $\text{Sin}\theta = \frac{1}{2}$
6. $\text{Tan}\theta$ is undefined
7. Given $270° \leq \theta \leq 360°$ and $\text{Sin}\theta = -\frac{\sqrt{3}}{2}$ find $\text{Cos}\theta$
8. Given $\text{Sin}\theta < 0$ and $\text{Cos}\theta = \frac{\sqrt{3}}{2}$ Find $\text{Tan}\theta$.

Algebra 2 Bellwork Tuesday, March 10, 2015 ANSWERS

Use the given infomation to find the measure of all the anlges θ that meet each condition. ($0° \leq \theta \leq 360°$)

1. $\text{Cos}\theta = \frac{\sqrt{2}}{2}$ $45°, 315°$
2. $\text{Sin}\theta = -1$ $270°$
3. $\text{Tan}\theta = \sqrt{3} = \frac{\frac{\sqrt{3}}{2}}{\frac{1}{2}}$ or $\frac{-\frac{\sqrt{3}}{2}}{-\frac{1}{2}}$ $60°, 240°$
4. $\text{Cos}\theta = -\frac{\sqrt{3}}{2}$ $150°, 210°$
5. $\text{Sin}\theta = \frac{1}{2}$ $30°, 150°$
6. $\text{Tan}\theta$ is undefined $= \frac{1}{0}$ or $\frac{-1}{0}$ $90°, 270°$
7. Given $270° \leq \theta \leq 360°$ and $\text{Sin}\theta = -\frac{\sqrt{3}}{2}$ find $\text{Cos}\theta = \frac{1}{2}$

   Quad IV

   Cos is +
8. Given $\text{Sin}\theta < 0$ and $\text{Cos}\theta = \frac{\sqrt{3}}{2}$ Find $\text{Tan}\theta$. $= \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} = -\frac{1}{\sqrt{3}} = -\frac{\sqrt{3}}{3}$

   $-1/2$