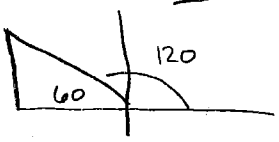
Analysis
Special Angles

No Calculators!

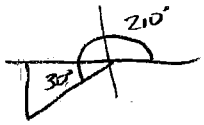
Name key

Determine the reference angle θ for each angle θ in standard position.

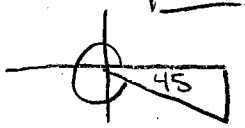
1) 120° $\boxed{60°}$



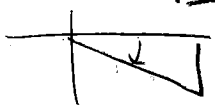
2) 210° $\boxed{30°}$



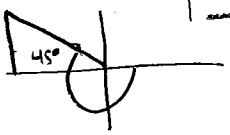
3) 315° $\boxed{45°}$



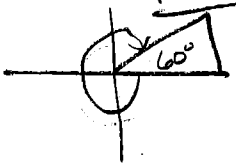
4) $-45°$ $\boxed{45°}$



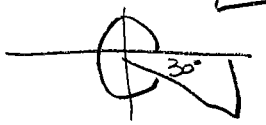
5) $-225°$ $\boxed{45°}$



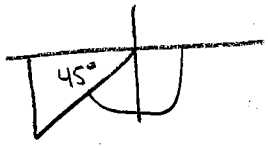
6) $-300°$ $\boxed{60°}$



7) 330° $\boxed{30°}$

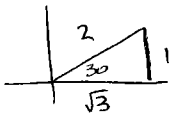


8) $-135°$ $\boxed{45°}$

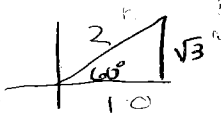


Find the exact values of the following trigonmetry.

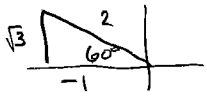
1) $\sin 30° = \boxed{\frac{1}{2}}$



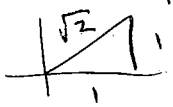
2) $\cos 60° \boxed{\frac{1}{2}}$



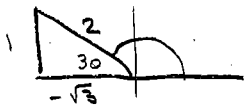
3) $\tan 120° = \boxed{-\sqrt{3}}$



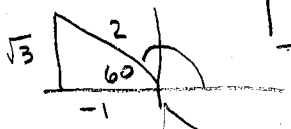
4) $\sec 45° = \boxed{\sqrt{2}}$



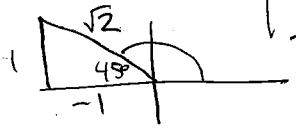
5) $\csc 150° = \boxed{2}$



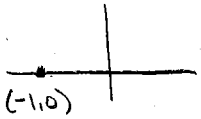
6) $\cot 120° = \boxed{\frac{-\sqrt{3}}{3}}$



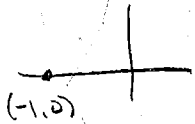
7) $\cos 135° = \boxed{-\frac{\sqrt{2}}{2}}$



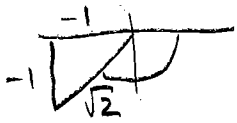
8) $\sin 180° = \boxed{0}$



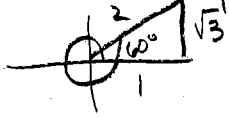
9) $\tan 180° = \boxed{0}$



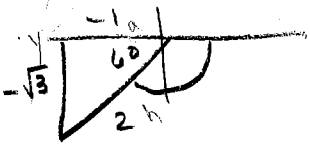
10) $\cot(-135°) = \boxed{1}$



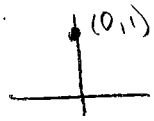
11) $\sin 420° = \boxed{\frac{\sqrt{3}}{2}}$



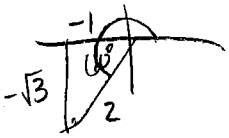
12) $\cos(-120°) = \boxed{-\frac{1}{2}}$



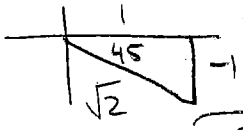
13) $\cos 90° = \boxed{0}$



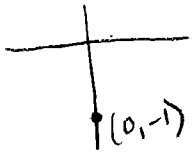
14) $\cos 240° = \boxed{-\frac{1}{2}}$



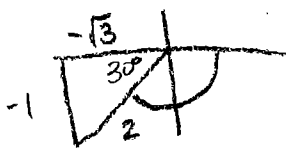
15) $\cos(-45°) = \boxed{\frac{\sqrt{2}}{2}}$



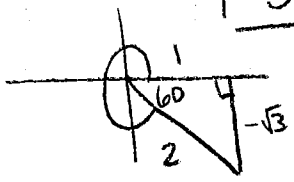
16) $\tan 270° = \boxed{\text{undefined}}$



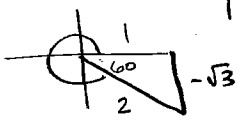
17) $\tan(-150°) = \boxed{\frac{\sqrt{3}}{3}}$



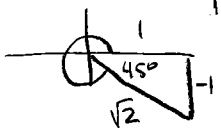
18) $\cot 300° = \boxed{-\frac{\sqrt{3}}{3}}$



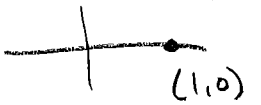
19) $\sin 300° = \frac{-\sqrt{3}}{2}$



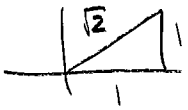
20) $\sin 315° = \frac{-\sqrt{2}}{2}$



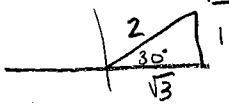
21) $\tan 360° = 0$



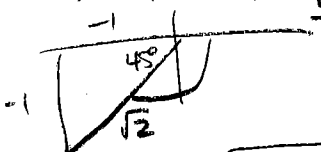
22) $\sec 45° = \sqrt{2}$



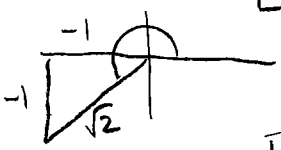
23) $\cot 390° = \sqrt{3}$



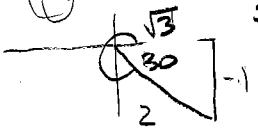
24) $\sec(-135°) = -\sqrt{2}$



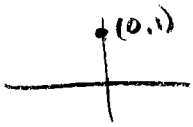
25) $\csc 225° = -\sqrt{2}$



26) $\sec 330° = \frac{2\sqrt{3}}{3}$

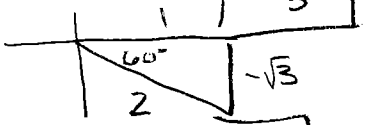


27) $\tan 90° =$ undefined

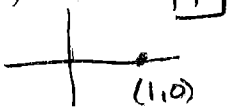


28) $\cot 90° = 0$

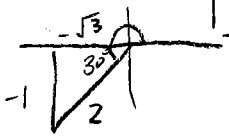
29) $\csc(-60°) = \frac{-2\sqrt{3}}{3}$



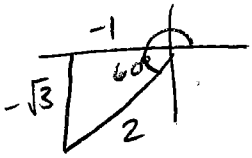
30) $\cos 0° = 1$



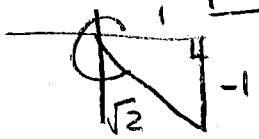
31) $\tan 210° = \frac{\sqrt{3}}{3}$



32) $\sin 240° = \frac{-\sqrt{3}}{2}$

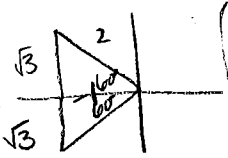


33) $\cos 315° = \frac{\sqrt{2}}{2}$



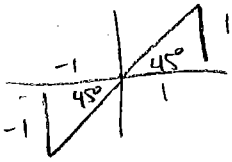
If $0° \le \theta \le 360°$ determine the value(s) of θ in degrees that make each statement true.

1) $\cos\theta = -\frac{1}{2}$



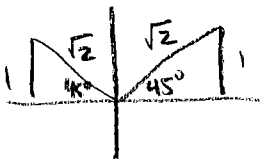
120°
240°

2) $\cot\theta = 1$



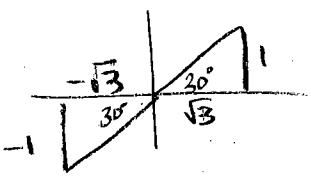
45°
225°

3) $\sin\theta = \frac{\sqrt{2}}{2} = \frac{1}{\sqrt{2}}$



45°
135°

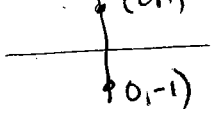
4) $\tan\theta = \frac{\sqrt{3}}{3} = \frac{1}{\sqrt{3}}$



30°
210°

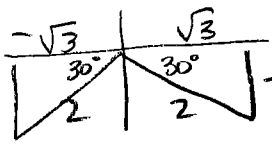
5) $\sec\theta$ is undefined

$\frac{r}{x}$ $x \neq 0$



90°
270°

6) $\csc\theta = -2$



210°
330°

7) $\sin\theta = -1$

8) $\cot\theta = \sqrt{3}$

9) $\cos\theta = -\frac{\sqrt{3}}{2}$