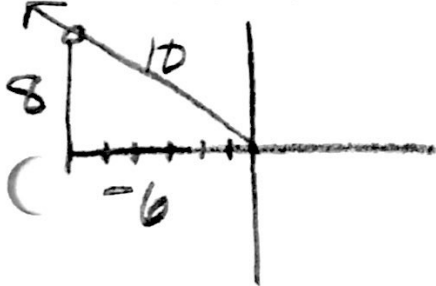


NO CALCULATOR

I. Convert.

<p>1. Convert <math>20^\circ</math> to radians</p> $\frac{20^\circ}{1} \cdot \frac{\pi}{180^\circ} = \frac{20\pi}{180} = \boxed{\frac{\pi}{9}}$	<p>2. Convert <math>\frac{5\pi}{3}</math> to degrees</p> $\frac{5\pi}{3} \cdot \frac{180}{\pi} = \boxed{300^\circ}$
<p>3. Convert <math>\frac{7\pi}{4}</math> to degrees</p> $\frac{7\pi}{4} \cdot \frac{180}{\pi} = \boxed{315^\circ}$	<p>4. Convert <math>120^\circ</math> to radians</p> $\frac{120^\circ}{1} \cdot \frac{\pi}{180^\circ} = \frac{120\pi}{180} = \boxed{\frac{2\pi}{3}}$

II. The point P has coordinates (-6,8) and is on the terminal side of angle  $\theta$ . Evaluate the six trigonometric functions for  $\theta$ . If the function is undefined, write "undefined."



$$8^2 + (-6)^2 = r^2$$

$$64 + 36 = r^2$$

$$100 = r^2$$

$$\boxed{10 = r}$$

$$\sin = \frac{8}{10} = \boxed{\frac{4}{5}} \quad \csc \boxed{\frac{5}{4}}$$

$$\cos = \frac{-6}{10} = \boxed{-\frac{3}{5}} \quad \sec \boxed{-\frac{5}{3}}$$

$$\tan = \frac{8}{-6} = \boxed{-\frac{4}{3}} \quad \cot \boxed{-\frac{3}{4}}$$

IV. Find the exact value for each.

<p>cos 150</p> $\boxed{-\frac{\sqrt{3}}{2}}$	<p>sin 210</p> $\boxed{-\frac{1}{2}}$	<p>cos 300</p> $\boxed{\frac{1}{2}}$
<p>sin 180</p> $\boxed{0}$	<p>Tan 270</p> $\boxed{\text{undefined}}$	<p>cos 225</p> $\boxed{-\frac{\sqrt{2}}{2}}$

Study!