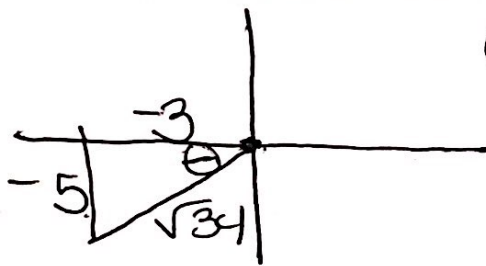


I. Convert.

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

II. The point P has coordinates (-3,-5) and is on the terminal side of angle  $\theta$ . Evaluate the six trigonometric functions for  $\theta$ . If the function is undefined, write "undefined."



$$(-3)^2 + (-5)^2 = r^2$$

$$9 + 25 = r^2$$

$$\sqrt{34} = \sqrt{r^2}$$

$$\sqrt{34} = r$$

$$\sin \theta = \frac{-5}{\sqrt{34}} = \frac{-5\sqrt{34}}{34}$$

$$\cos \theta = \frac{-3}{\sqrt{34}} = \frac{-3\sqrt{34}}{34}$$

$$\tan \theta = \frac{-5}{-3} = \frac{5}{3}$$

IV. Find the exact value for each.

<p><math>\cos \frac{3\pi}{2}</math> (cos, sin)</p> <p>90 180 270 (0, -1)</p>	<p>csc 210</p>	<p>cot 300</p>
<p>sin 300</p>	<p><math>\tan \frac{9\pi}{4}</math></p>	<p>sec -pi</p> <p>sec -180</p>