

13. $r = \sqrt{5^2 + 7^2} = \sqrt{74}$. Then $\sin \theta = \frac{5}{\sqrt{74}}$, $\cos \theta = \frac{7}{\sqrt{74}}$, $\tan \theta = \frac{5}{7}$, $\csc \theta = \frac{\sqrt{74}}{5}$, $\sec \theta = \frac{\sqrt{74}}{7}$, and $\cot \theta = \frac{7}{5}$.

15. $\frac{x}{5} = \cos 40^\circ \Leftrightarrow x = 5 \cos 40^\circ \approx 3.83$, and $\frac{y}{5} = \sin 40^\circ \Leftrightarrow y = 5 \sin 40^\circ \approx 3.21$

17. $\frac{1}{x} = \sin 20^\circ \Leftrightarrow x = \frac{1}{\sin 20^\circ} \approx 2.92$, and $\frac{x}{y} = \cos 20^\circ \Leftrightarrow y = \frac{x}{\cos 20^\circ} \approx \frac{2.924}{0.9397} \approx 3.11$