Each problem is worth 5 points. For full credit provide complete justification for your answers.

1. If \( \theta \) is a second-quadrant angle for which \( \sin \theta = 2/3 \), what are

\[
\cos \theta = \\
\tan \theta = \\
\csc \theta = \\
\sec \theta = \\
\cot \theta = \\
\]

2. Give an exact value for \( \sin 60^\circ \).

3. Give an exact value for \( \cos 225^\circ \).