

BLM 4–5 Section 4.3 Extra Practice

1. a) $\frac{1}{2}$ b) $-\frac{1}{2}$ c) -1 d) -1 e) $\frac{2}{\sqrt{3}}$ or $\frac{2\sqrt{3}}{3}$ f) -1

2. a) $\frac{1}{\sqrt{3}}$ or $\frac{\sqrt{3}}{3}$ b) $-\frac{1}{2}$ c) -1 d) -1

e) $\sqrt{3}$ f) $\sqrt{2}$

3. a) 0.64 b) -0.82 c) -2.36 d) -1.19

4. a) -1.25 b) -0.73 c) 1.03 d) 0.68

5. a) II or III b) I or II c) I or III

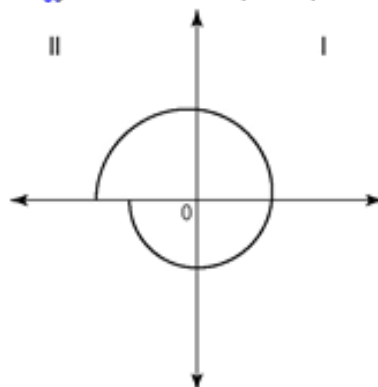
d) IV e) IV f) II

7. a) $135^\circ, 315^\circ$ b) $-30^\circ, 30^\circ$

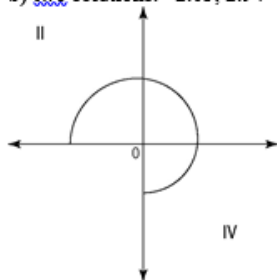
c) 30° d) $-270^\circ, -90^\circ, 90^\circ, -270^\circ$

8. a) $\frac{\pi}{3}, \frac{2\pi}{3}$ b) $-\pi, \pi$ c) $\frac{2\pi}{3}, \frac{4\pi}{3}$ d) $-\frac{\pi}{4}, \frac{3\pi}{4}, \frac{7\pi}{4}$

9. a) two solutions; $0.43, 2.71$

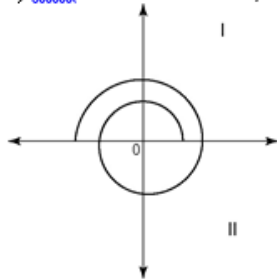


b) two solutions: -2.03, 2.94



$$\begin{array}{l}
 \downarrow \\
 10. \sin \theta = -\frac{12}{13} \\
 \cos \theta = \frac{5}{13} \\
 \tan \theta = -\frac{12}{5}
 \end{array}
 \qquad
 \begin{array}{l}
 \csc \theta = -\frac{13}{12} \\
 \sec \theta = \frac{13}{5} \\
 \cot \theta = -\frac{5}{12}
 \end{array}$$

c) three solutions: -281.85°, -78.15°, 78.15°



d) three solutions: -123.69°, 56.31°, 236.31°

