

## Answers to Worksheet 9 - Lesson 32

1) (a)  $60^\circ$  or  $\frac{\pi}{3}$

(b)  $120^\circ$  or  $\frac{2\pi}{3}$

(c)  $45^\circ$  or  $\frac{\pi}{4}$

(d)  $135^\circ$  or  $\frac{3\pi}{4}$

(e)  $-30^\circ$  or  $-\frac{\pi}{6}$

(f)  $-60^\circ$  or  $-\frac{\pi}{3}$

3)  $\theta = \frac{5\pi}{6} + 2\pi k$  and

$\theta = \frac{7\pi}{6} + 2\pi k$ , for any integer k

5)  $\frac{\sqrt{3}}{2}$

6)  $5 \cdot \frac{\sqrt{41}}{41}$

2)  $\theta = \frac{\pi}{4} + 2\pi k$  and

$\theta = \frac{3\pi}{4} + 2\pi k$ , k any integer

4)  $\theta = \frac{\pi}{6} + \pi k$ , for any integer k

7)  $\frac{\sqrt{3}}{2}$

8)  $135^\circ$