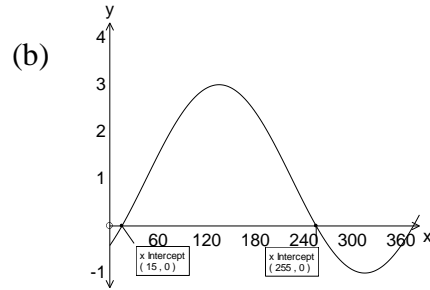
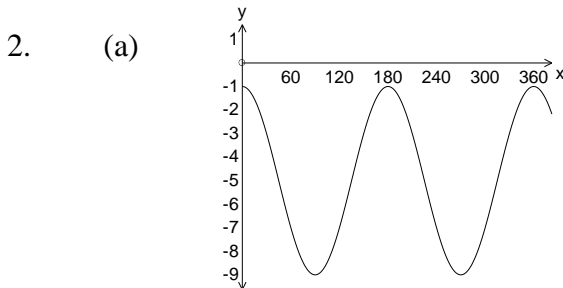


Trigonometry 1 (answers)

1. (a) $y = 2\sin 3x$
 (b) $y = 2\sin 0.5x + 1$
 (c) $y = 3\sin\left(x - \frac{\pi}{3}\right)$



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

4. (a) $x = 150^\circ, 330^\circ$ (b) $x = 15^\circ, 75^\circ, 195^\circ, 255^\circ$ (c) $x = 45^\circ, 135^\circ, 225^\circ, 315^\circ$

5. (a) $x = \frac{\pi}{4}, \frac{3\pi}{4}$ (b) $x = \frac{\pi}{12}, \frac{11\pi}{12}, \frac{13\pi}{12}, \frac{23\pi}{12}$ (c) $x = \frac{\pi}{6}, \frac{5\pi}{6}, \frac{7\pi}{6}, \frac{11\pi}{6}$

6. (a) $x = 48.2^\circ, 138.6^\circ, 221.4^\circ, 311.8^\circ$

(b) $x = \frac{7\pi}{24}, \frac{23\pi}{24}$

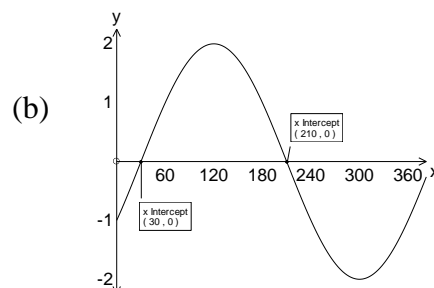
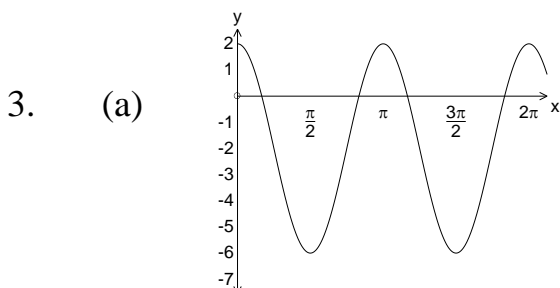
7. (a) $a = 1, b = 2, \text{ and } c = 2$

(b) $x = \frac{\pi}{12}, \frac{5\pi}{12}$

Trigonometry 2 (answers)

1. (a) $\frac{\pi}{3}$ (b) $\frac{3\pi}{4}$ (c) $\frac{7\pi}{4}$ (d) $\frac{7\pi}{6}$

2. (a) 15° (b) 135° (c) 315° (d) 25°



4. $a = \frac{5\pi}{4}$, $b = \frac{7\pi}{4}$, $c = -4$, $d = \frac{9\pi}{4}$

5. (a) $x = \frac{\pi}{12}$, $\frac{5\pi}{12}$, $\frac{13\pi}{12}$, $\frac{17\pi}{12}$

(b) $x = 56 \cdot 3$, $144 \cdot 5$, $236 \cdot 3$, $324 \cdot 5$

(c) $x = \frac{\pi}{6}$, $\frac{5\pi}{6}$

(d) $x = 30^\circ$, 90° , 210° , 270°

6. $x = 37 \cdot 5$, $172 \cdot 5$