BOOK WORK: p.947 (19 – 29 odd – optional)

(Required: 31 – 37 odd, 38, 39, 41 – 45, 48, 51, 52)

Convert each measure from degrees to radians or from radians to degrees.

1.
$$-\frac{3\pi}{2}$$

3.
$$\frac{5\pi}{18}$$

5.
$$\frac{7\pi}{4}$$

6.
$$-\frac{11\pi}{6}$$

8.
$$\frac{7\pi}{20}$$

Find the exact value of the sine, cosine, and tangent of each angle.

14.
$$\frac{7\pi}{4}$$

16.
$$\frac{5\pi}{6}$$

21.
$$-\frac{5\pi}{6}$$

22.
$$-\frac{\pi}{4}$$

23.
$$-\frac{\pi}{3}$$

25. A pendulum is 18 feet long. Its central angle is 44°. The pendulum makes one back and forth swing every 12 seconds. To the nearest foot, how far does the pendulum swing each minute?

26. San Antonio, Texas, is located about 30° north of the equator. If Earth's radius is about 3959 miles, approximately how many miles is San Antonio from the equator?

Use unit circle as needed:

