Worksheet for Sections 5.4 and 5.5

1. Find the reference angles of the following angles:

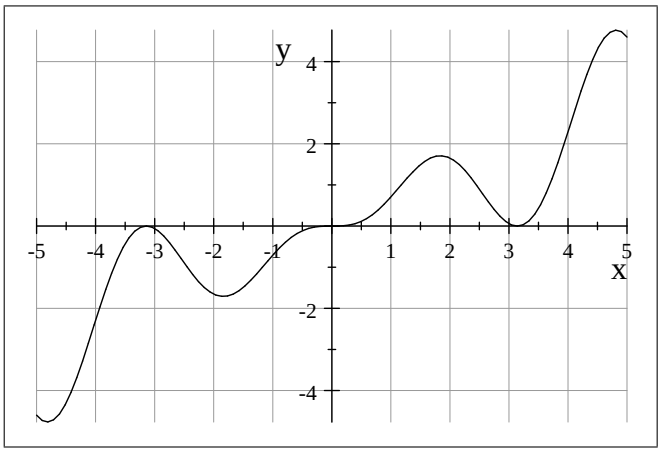
$$\theta = 280 \text{ degrees}$$
$$\theta = -\frac{5\pi}{4}$$
$$\theta = 170 \text{ degrees}$$

2. Find the values of each of the other five trigonometric functions without finding θ

   (a) $\tan\theta = -\frac{4}{3}$ and $\sin\theta < 0$

   (b) $\sec\theta = 10$ and $\tan\theta < 0$

3. Determine if the following function is even or odd

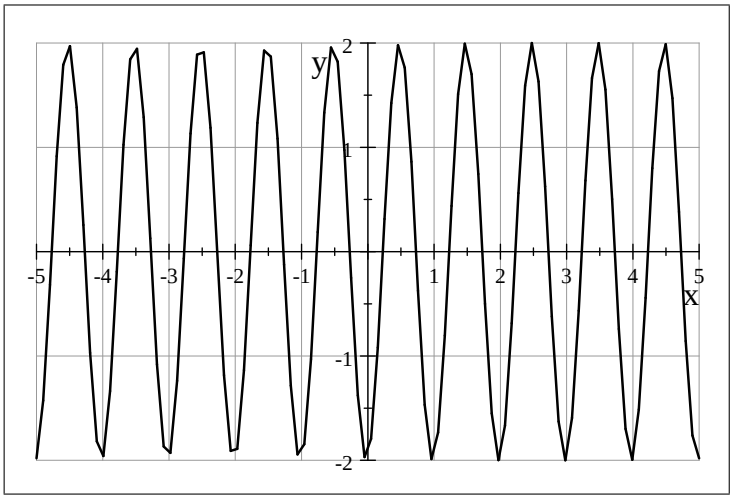


4. Without using a calculator, find the smallest positive angle for which

$$\sin\theta = -1/2$$

5. Find all function of the form $f(x) = ax + b$ that are even

6. Find the amplitude, and the period of the following graph



7. Find the amplitude, the period and all the turning points in the given interval and finally sketch the graph of the function below

$$\frac{\pi}{2}\sin\left(x+\pi/4\right) \text{ where } x \in [-2\pi, 2\pi]$$

8. If the equation of the graph below is of the form $A\sin\left(Bx+C\right)$, find A, B and C $4\sin\left(\frac{\pi}{2}x+\frac{\pi}{2}\right)$