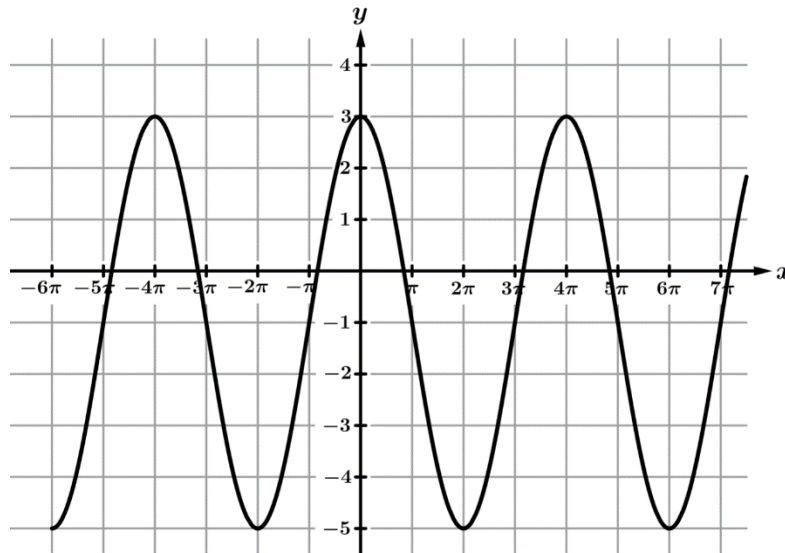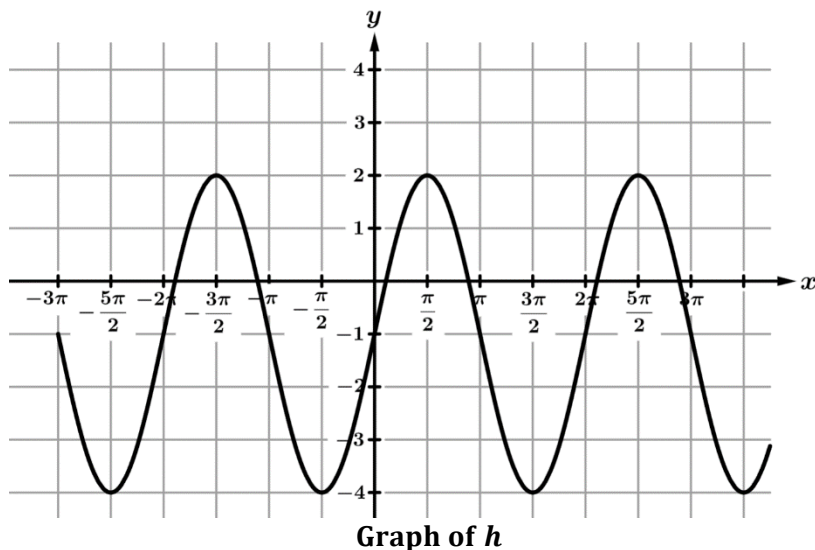**Graph of h**

1. The graph of the sinusoidal function h is shown in the figure above. The function h can be written as $h(\theta) = a\sin(b\theta) + d$. Find the values of the constants a, b, and d.
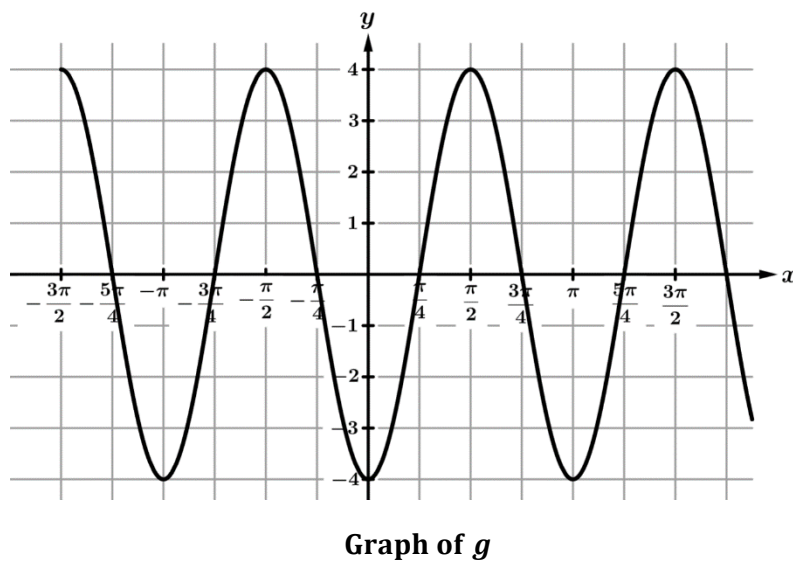

Graph of f

2. The graph of the sinusoidal function f is shown in the figure above. The function f can be written as $f(\theta) = a\cos(b\theta) + d$. Find the values of the constants a, b, and d.
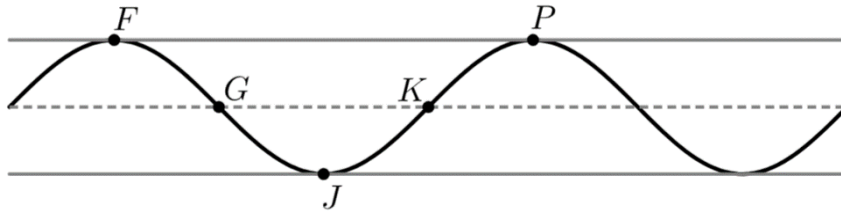
Graph of h

3. The figure shows the graph of a trigonometric function h. Which of the following could be an expression for $h(x)$

(A) $-3\sin(x) - 2$
(B) $3\sin(x - \pi) - 1$
(C) $-3\cos\left(x - \dfrac{3\pi}{2}\right) - 1$
(D) $3\cos\left(\left(x + \dfrac{\pi}{2}\right)\right) - 1$

Graph of g

4. The figure shows the graph of a trigonometric function g. Which of the following could be an expression for $g(x)$
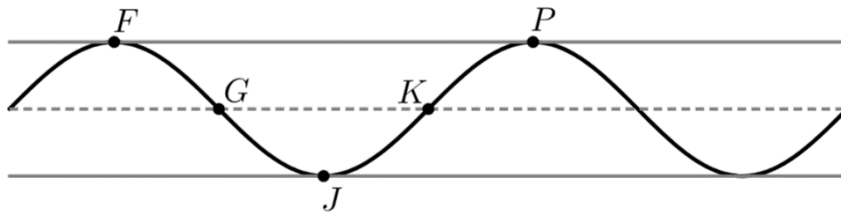
(A) $4\cos(2x)$
(B) $4\cos\left(2\left(x - \dfrac{\pi}{4}\right)\right)$
(C) $-4\cos\left(2\left(x - \dfrac{\pi}{2}\right)\right)$
(D) $-4\cos(2(x - \pi))$

5. The graph of h and its dashed midline for two full cycles is shown. Five points, F, G, J, K, and P are labeled on the graph. No scale is indicated, and no axes are presented.

The coordinates for the five points F, G, J, K, and P are $F(4, 64)$, $G(7, 50)$, $J(10, 36)$, $K(13, 50)$, $P(16, 64)$.

The function h can be written in the form $h(t) = a\cos(b(t+c)) + d$. Find values of constants a, b, c, and d.

6. The graph of h and its dashed midline for two full cycles is shown. Five points, F, G, J, K, and P are labeled on the graph. No scale is indicated, and no axes are presented.

The coordinates for the points F, G, J, K, and P are $F(0, -2), G(\pi, -6), J(2\pi, -10), K(3\pi, -6), P(4\pi, -2)$

The function h can be written in the form $h(t) = a\sin(b(t+c)) + d$. Find values of constants a, b, c, and d.