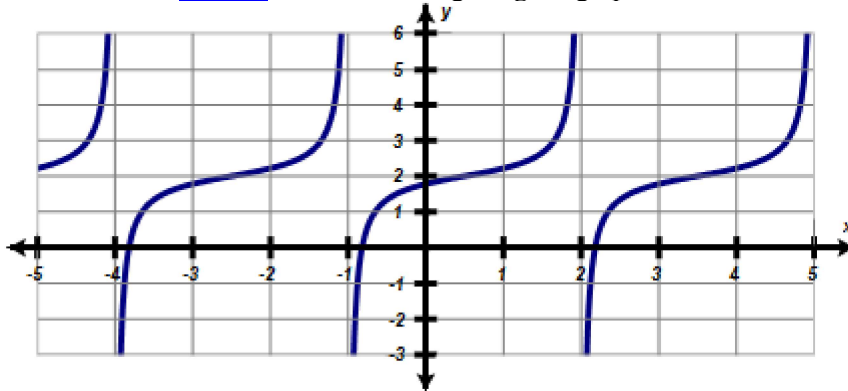


Sample Quiz 02-06-Graphing Tangent Functions**Multiple Choice**

Identify the choice that best completes the statement or answers the question.

1. Tangent Graphs

Determine the period of the following **tangent** graph.



a. 2

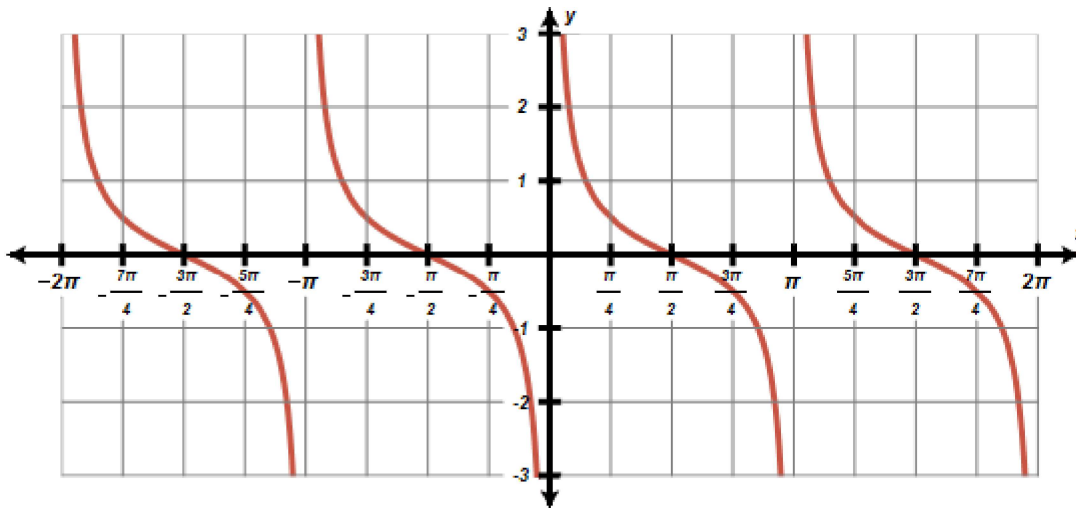
c. $\frac{2\pi}{3}$

b. 3

d. $\frac{\pi}{3}$

2. Cotangent Graphs

Determine the period of the following **cotangent** graph.



a. $\frac{\pi}{2}$

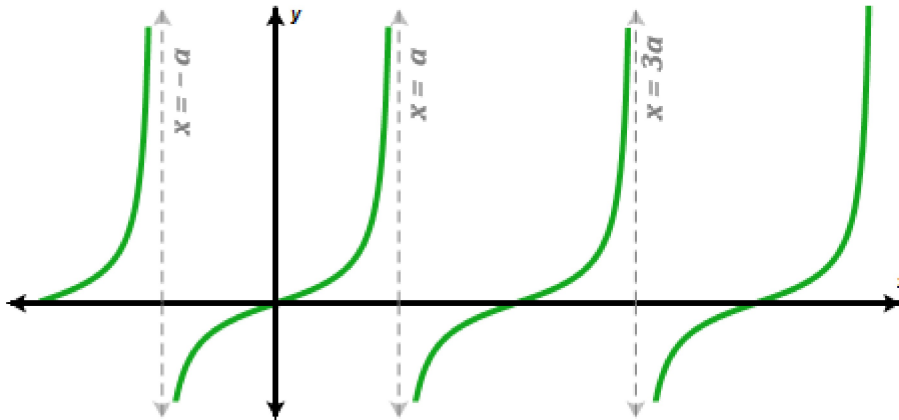
c. 2

b. π

d. 2π

3. **Tangent Graphs**

Consider the following **tangent** graph. Three consecutive vertical asymptotes of the graph can be described as $x = -a$, $x = a$, and $x = 3a$ respectively. Determine the **period** of the such a tangent graph.



- a. a
 b. $2a$
 c. $3a$
 d. $4a$

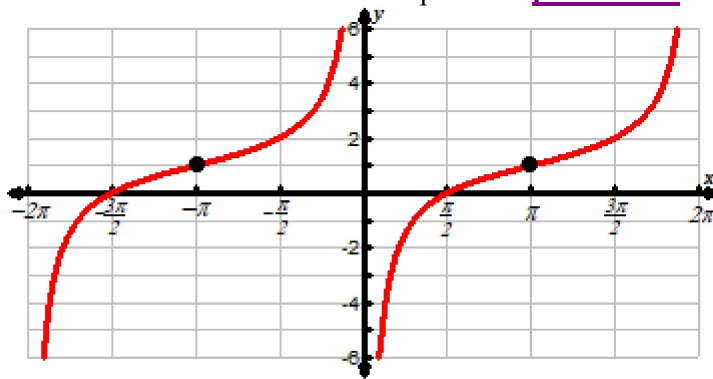
4. **Tangent Graphs**

What is the **period** of the **tangent** graph described by $y = \tan(2x + 6) - 1$?

- a. 2
 b. 6
 c. π
 d. $\frac{\pi}{2}$

5. **Tangent Graphs**

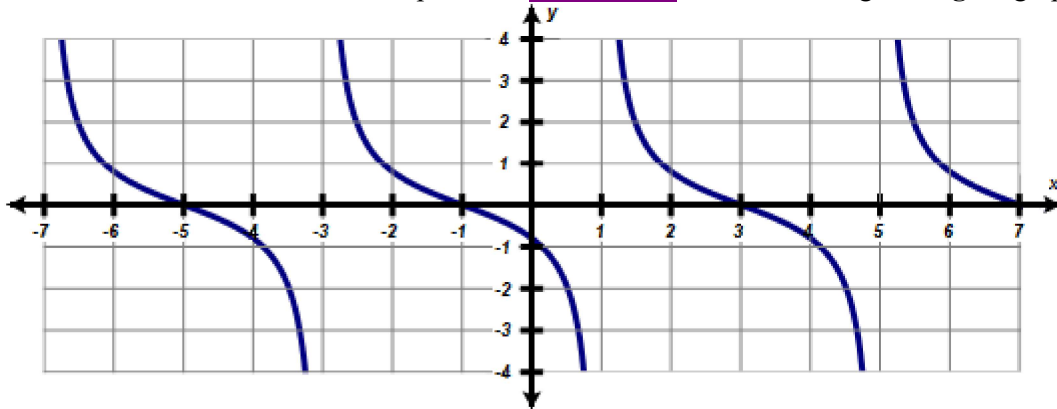
Determine which of the below is a possible **phase shift** of the following **tangent** graph.



- a. $-\frac{\pi}{2}$
 b. 0
 c. 1
 d. π

6. **Cotangent Graphs**

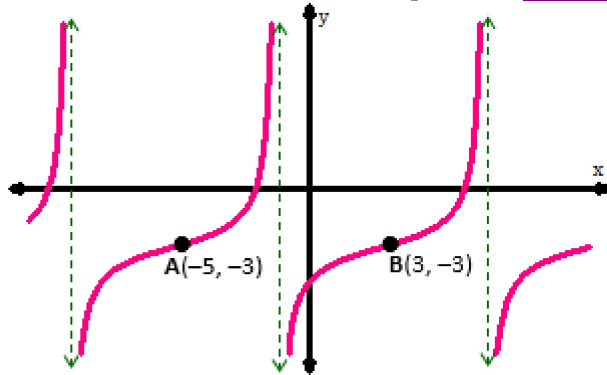
Determine which of the below is a possible phase shift of the following **cotangent** graph.



- a. 1
b. 3
c. π
d. 4

7. **Tangent Graphs**

Determine which of the below is a possible phase shift of the following **tangent** graph.



- a. -3
b. -1
c. 3
d. 8

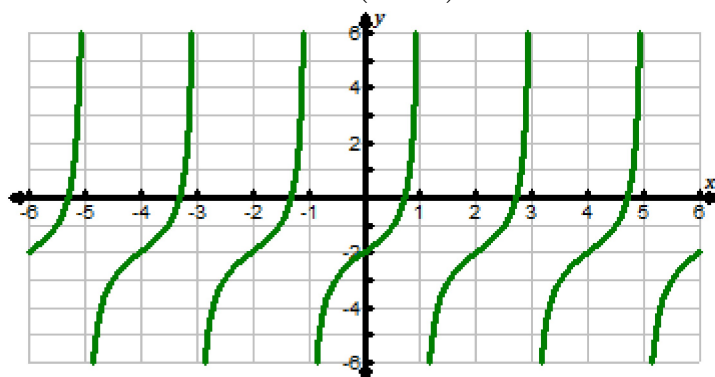
8. **Tangent Graphs**

Which equation below represents a **tangent** graph with a phase shift of 3?

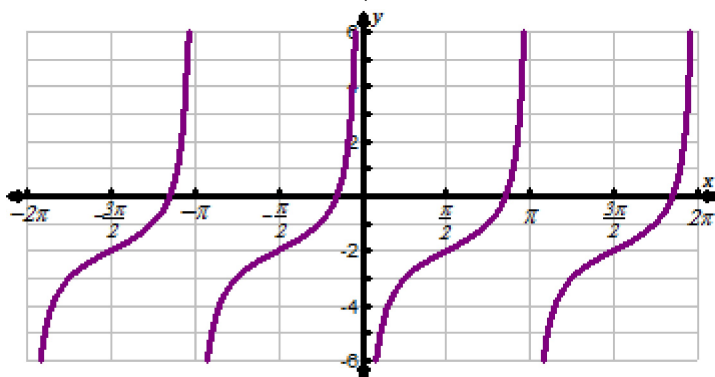
- a. $y = \tan\left(\frac{2\pi}{3}(x-3)\right)$
b. $y = 2 \tan\left(\frac{\pi}{3} \cdot x\right) + 3$
c. $y = 3 \tan(3\pi(x-1))$
d. $y = -\frac{2\pi}{3} \tan(3(x))$

12. **Tangent Graphs**

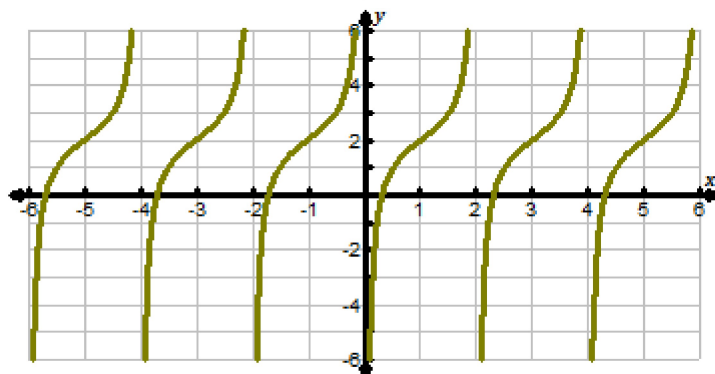
Which shows a graph of $y = \tan\left(x - \frac{\pi}{2}\right) - 2$?



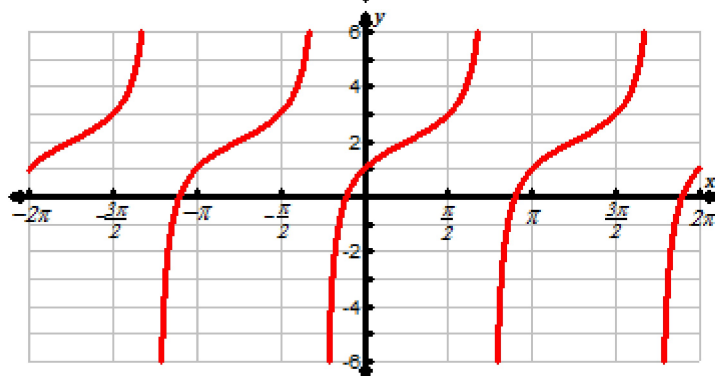
a.



b.



c.



d.