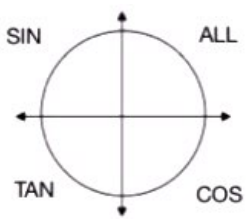
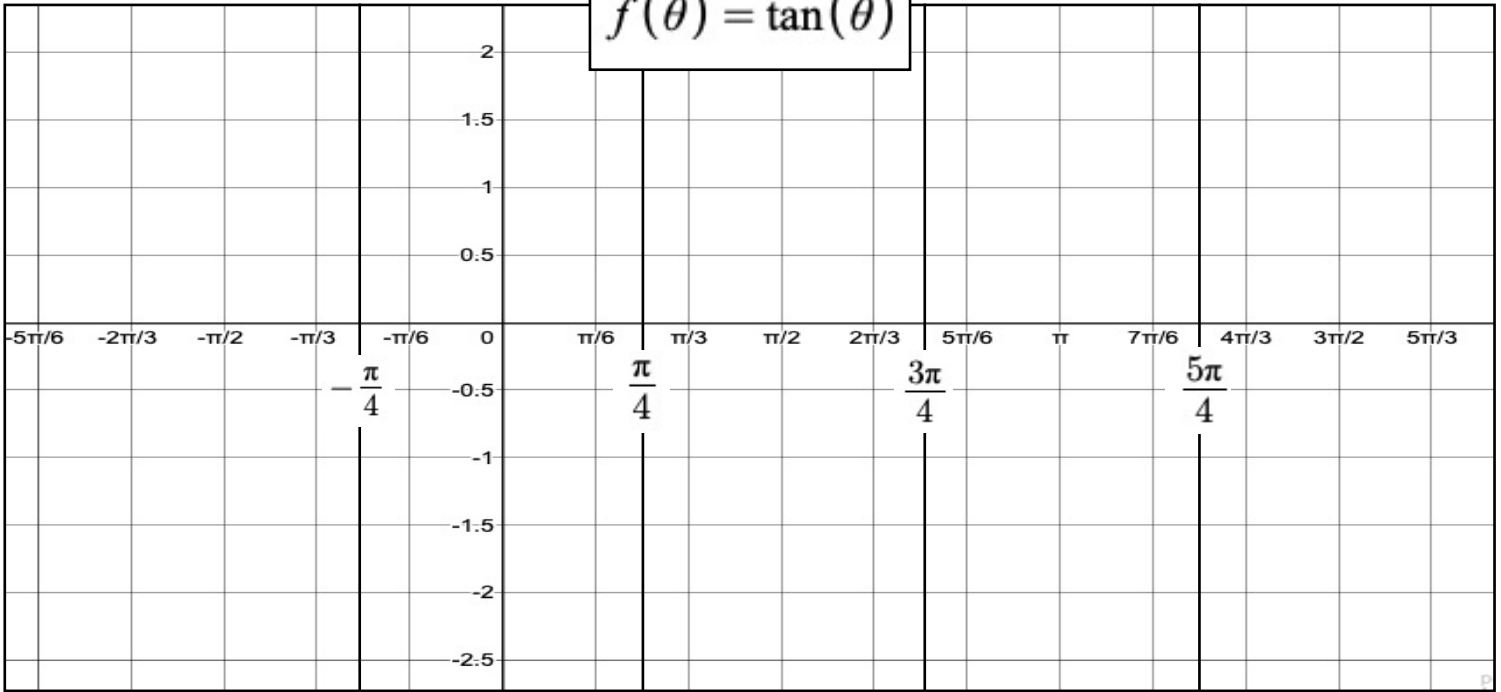


$$f(\theta) = \tan(\theta)$$



Quality of life estimates

$$\frac{\sqrt{3}}{3} = 0.6$$

$$\sqrt{3} = 1.7$$

Physique: \_\_\_\_\_

Period: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

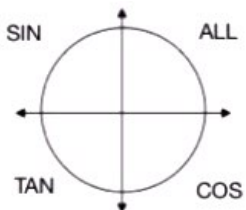
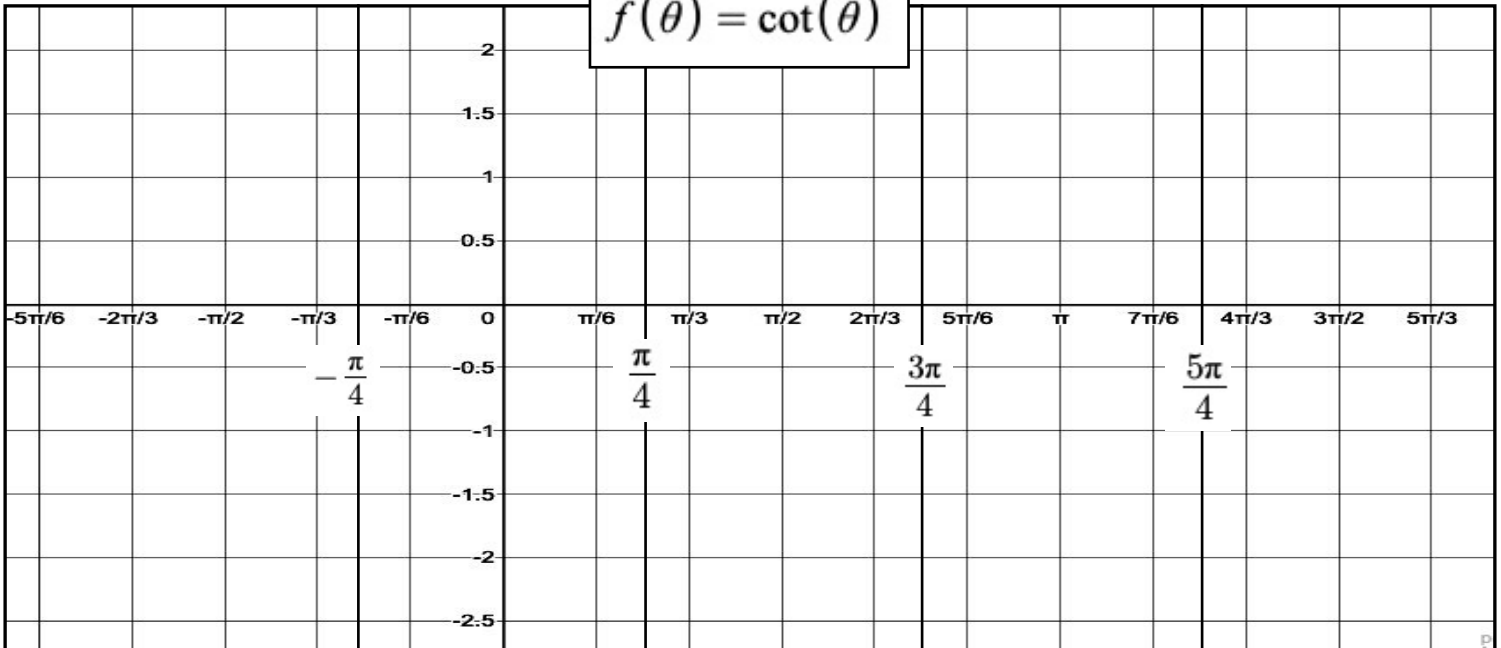
X - intercepts: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

$$f(\theta) = \cot(\theta)$$



Quality of life estimates

$$\frac{\sqrt{3}}{3} = 0.6$$

$$\sqrt{3} = 1.7$$

Physique: \_\_\_\_\_

Period: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

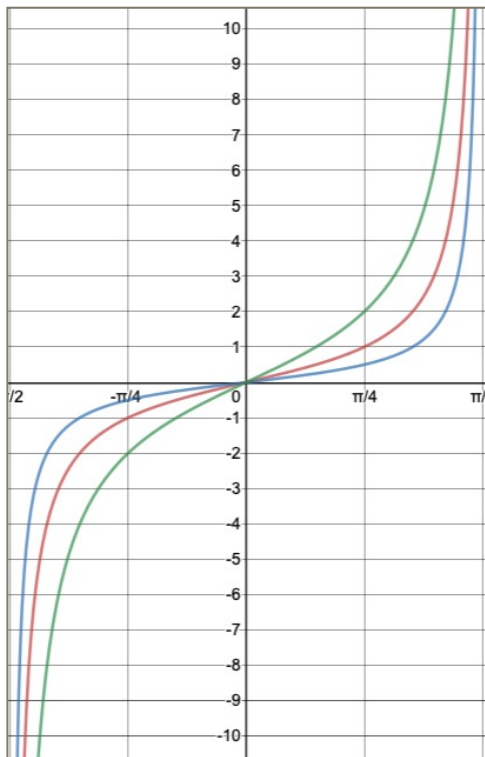
Vertical Shift: \_\_\_\_\_

X - intercepts: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_



$$f(\theta) = A \tan(B\theta - C) + D$$

**Physique:** *What is it? How to find it. How does it affect the graph?*

$$f(\theta) = \frac{1}{2} \tan(\theta) \quad f(\theta) = \tan(\theta) \quad f(\theta) = 2 \tan(\theta)$$

In General...

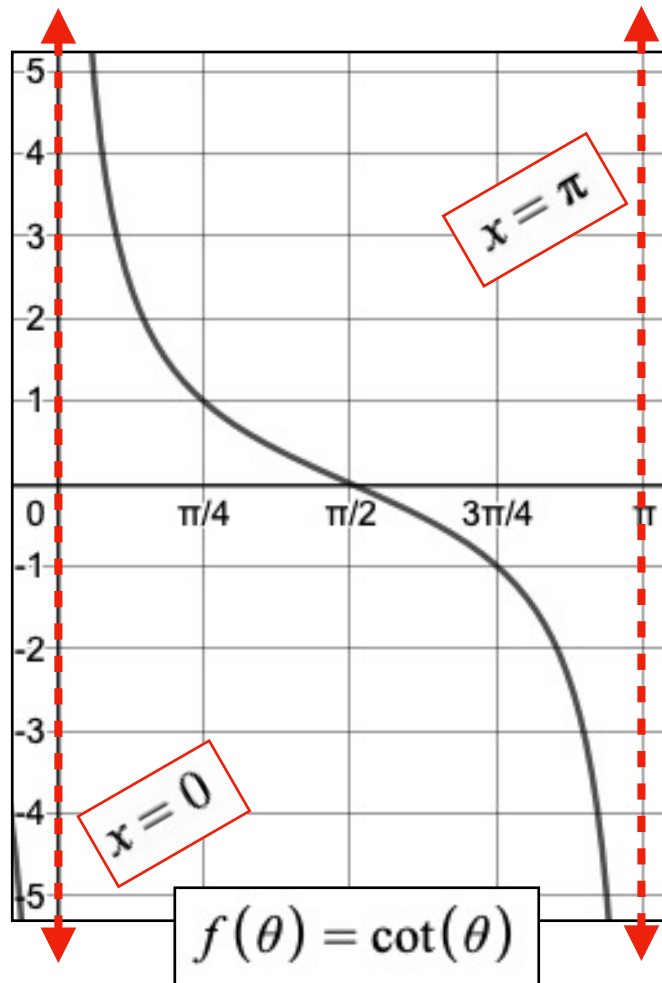
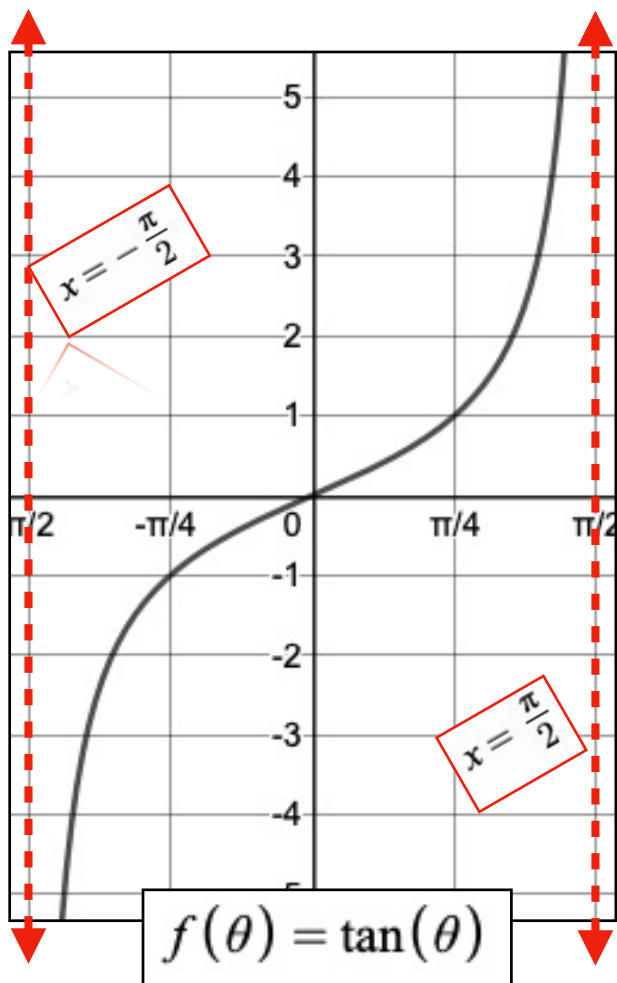
If  $0 < A < 1$ , then the physique is \_\_\_\_\_

If  $A = 1$ , then the physique is \_\_\_\_\_

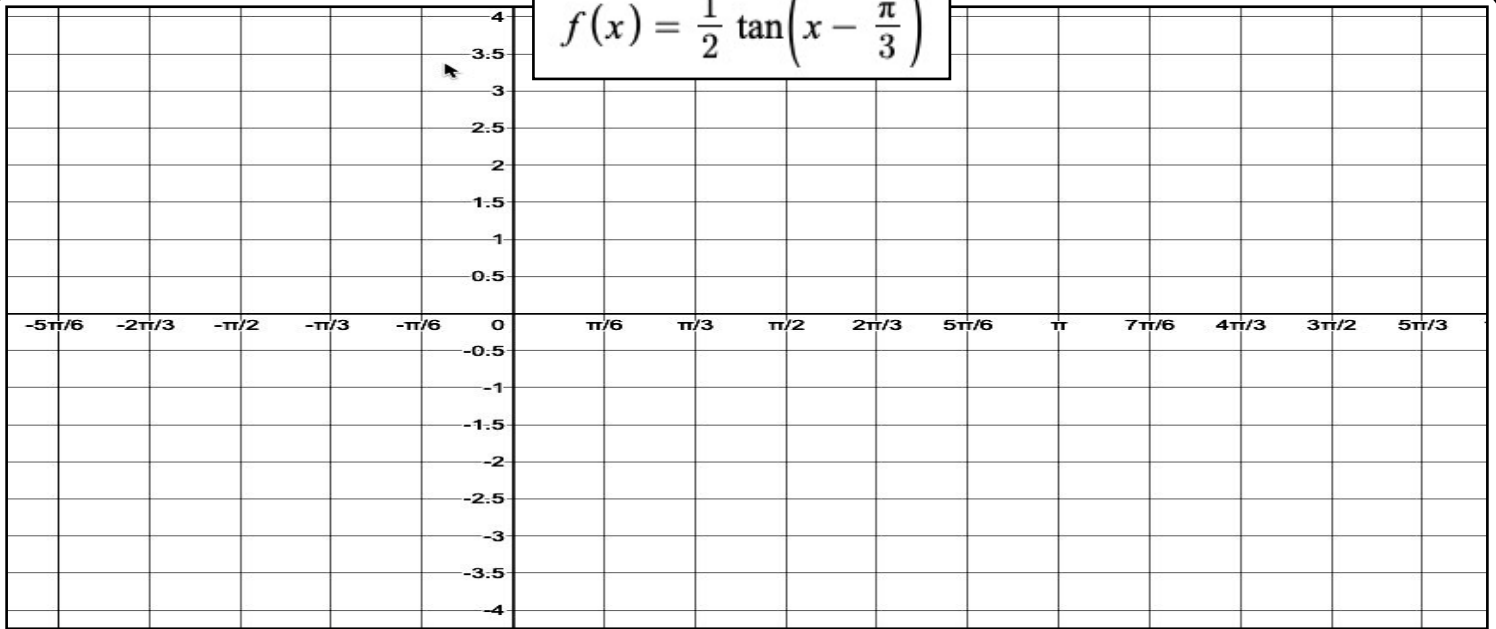
If  $A > 1$ , then the physique is \_\_\_\_\_

If  $A < 1$ , then the physique is \_\_\_\_\_

Where to start graphing?



$$f(x) = \frac{1}{2} \tan\left(x - \frac{\pi}{3}\right)$$



Physique: \_\_\_\_\_

X - intercepts: \_\_\_\_\_

Period: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

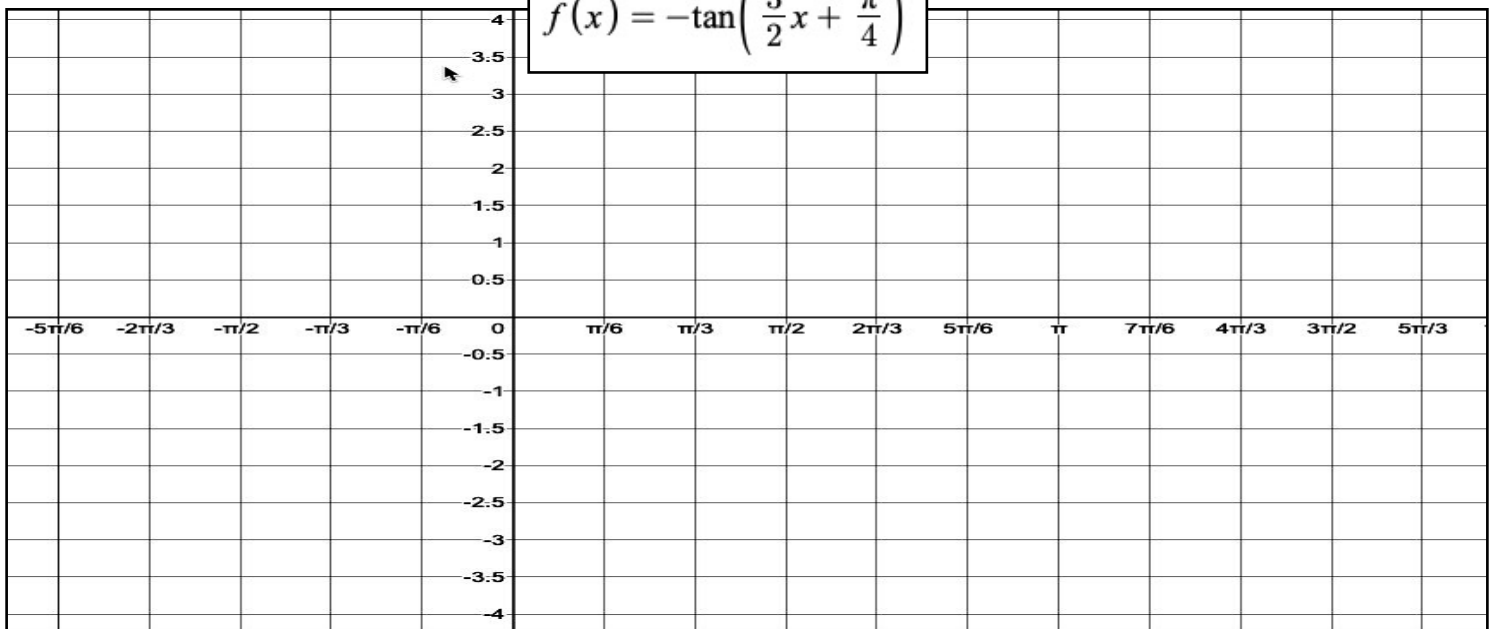
Phase Shift: \_\_\_\_\_

Domain: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

Range: \_\_\_\_\_

$$f(x) = -\tan\left(\frac{3}{2}x + \frac{\pi}{4}\right)$$



Physique: \_\_\_\_\_

X - intercepts: \_\_\_\_\_

Period: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

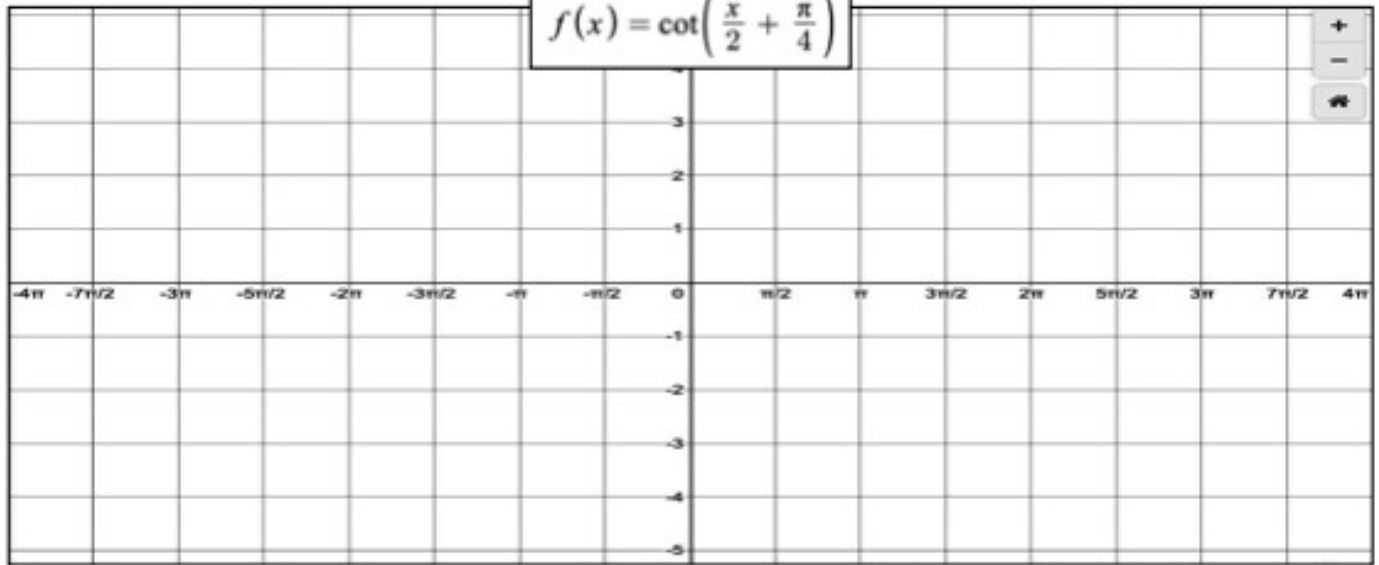
Phase Shift: \_\_\_\_\_

Domain: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

Range: \_\_\_\_\_

$$f(x) = \cot\left(\frac{x}{2} + \frac{\pi}{4}\right)$$



Physique: \_\_\_\_\_

X - intercepts: \_\_\_\_\_

Period: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

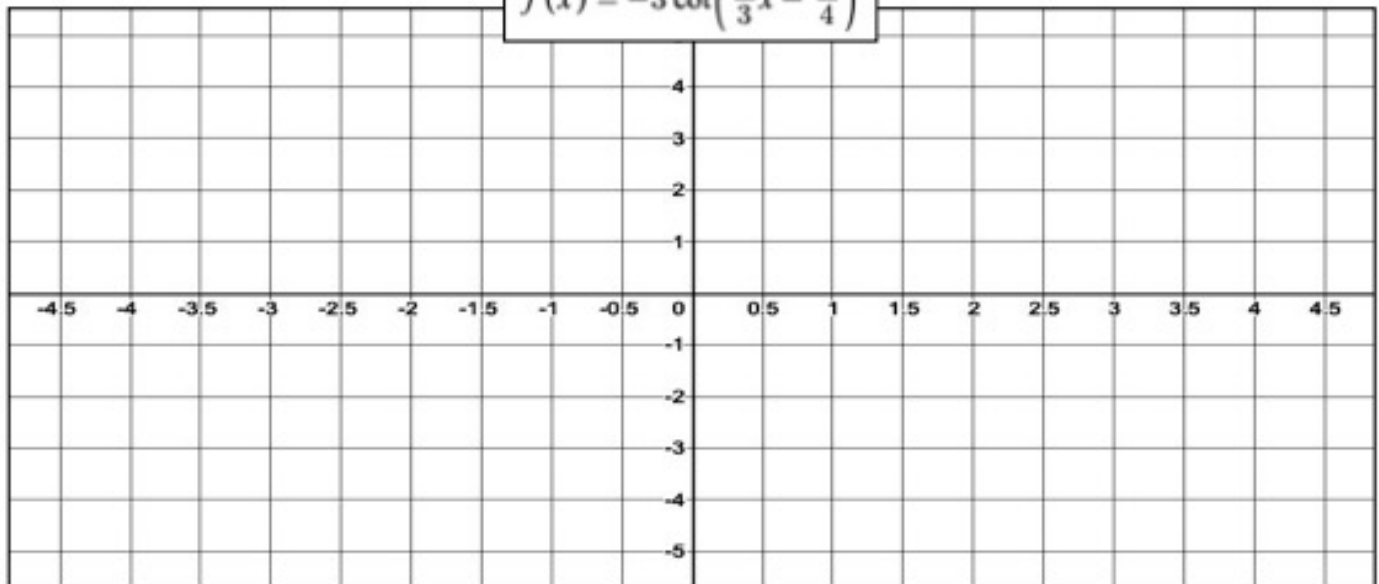
Phase Shift: \_\_\_\_\_

Domain: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

Range: \_\_\_\_\_

$$f(x) = -3 \cot\left(\frac{\pi}{3}x - \frac{\pi}{4}\right)$$



Physique: \_\_\_\_\_

X - intercepts: \_\_\_\_\_

Period: \_\_\_\_\_

Y - intercepts: \_\_\_\_\_

Phase Shift: \_\_\_\_\_

Domain: \_\_\_\_\_

Vertical Shift: \_\_\_\_\_

Range: \_\_\_\_\_

