

5.4 part 1 WARM-UP

NAME:

PER:

Factor, then state the period and horizontal shift.

A. $y = \cos\left(\frac{1}{4}x - \pi\right)$

B. $y = \cot(2x + 3\pi)$

C. $y = \csc\left(\frac{x}{3} + \frac{\pi}{6}\right)$

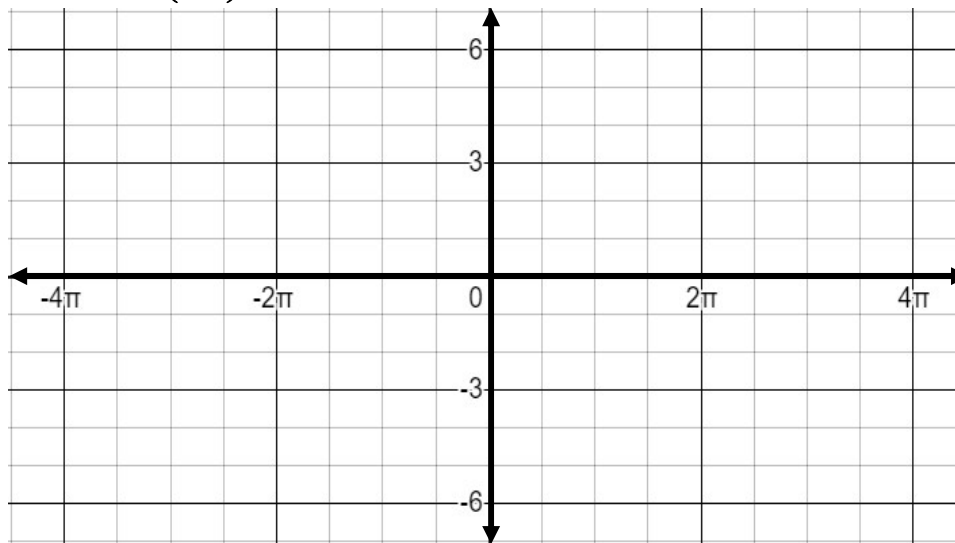
D. $y = \tan\left(3x - \frac{\pi}{2}\right)$

WRITE EQUATION IN FACTORED FORM,
THEN CHECK ANSWERS FOR **PERIOD**
AND **HORIZONTAL SHIFT**: (out of order)

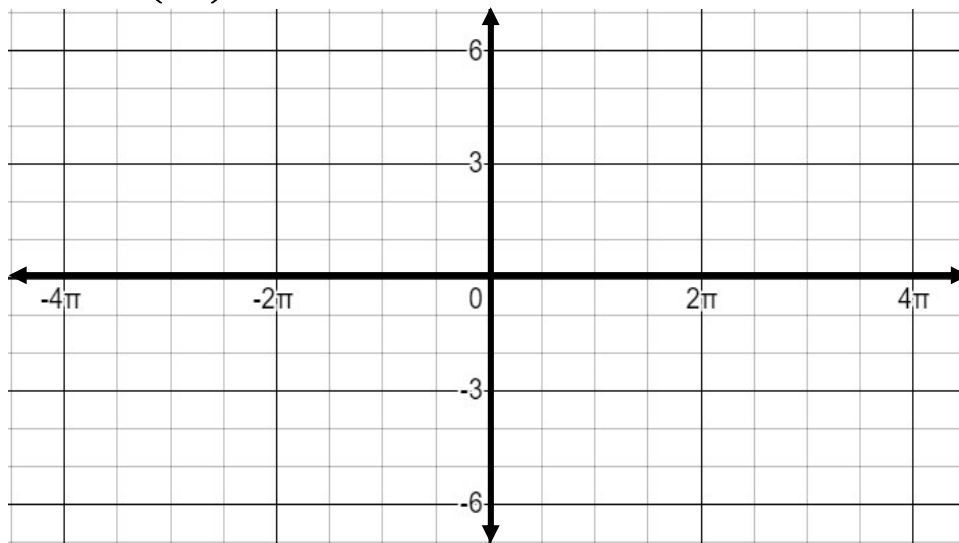
$-\frac{3\pi}{2}$ $-\frac{\pi}{2}$ $\frac{\pi}{6}$ $\frac{\pi}{3}$ $\frac{\pi}{2}$ 4π 6π 8π

Identify the period, then sketch a graph for $-4\pi \leq x \leq 4\pi$

E. $y = -3\csc\left(\frac{1}{2}x\right)$



F. $y = 2\cot\left(\frac{1}{2}x\right)$



5.4 #3-8, 9, 13, 15, 17, 29, 31 → → Carefully plot key values, sketch graph

#3-8: Write equation, match graphs I-VI

___ 3. equation:

___ 4. equation:

___ 5. equation:

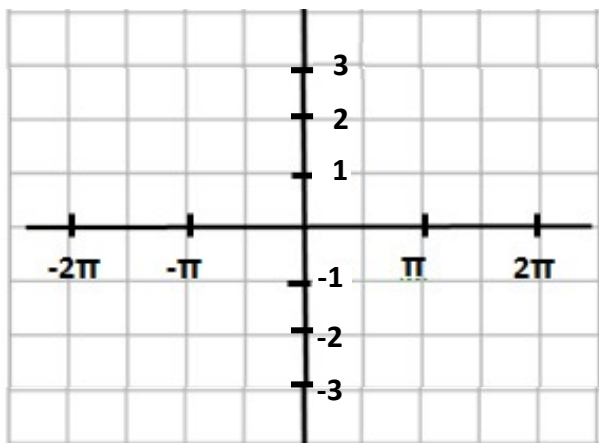
___ 6. equation:

___ 7. equation:

___ 8. equation:

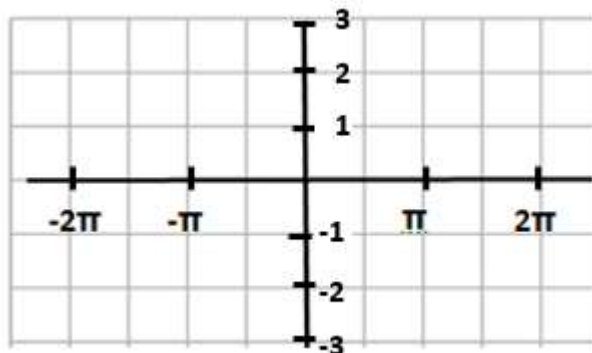
9. equation:

k = per =



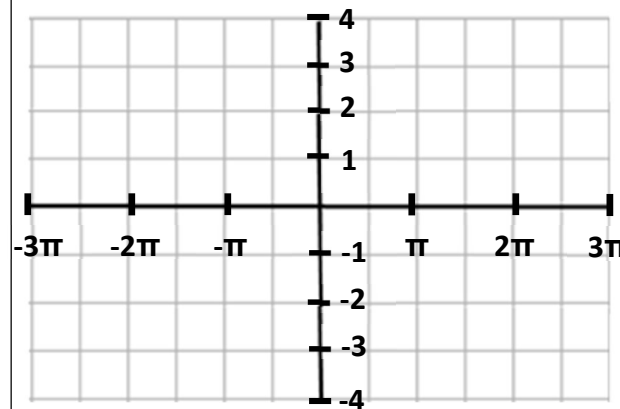
13. equation:

k = per =



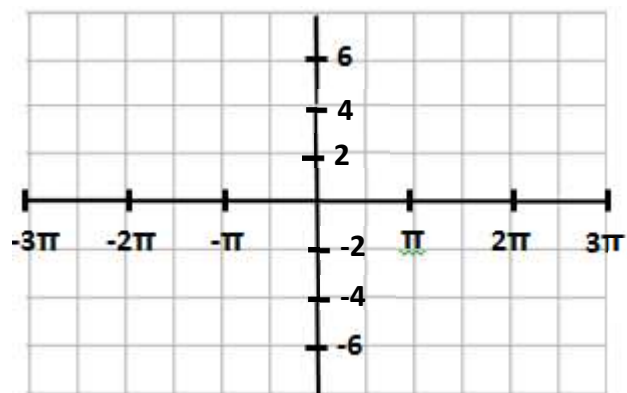
15. equation:

k = per =



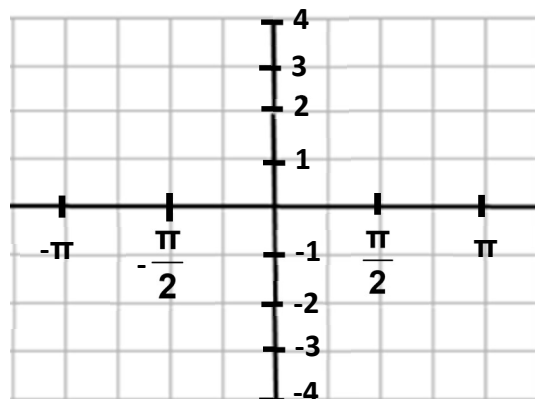
17. equation:

k = per =



29. equation:

k = per =



31. equation:

k = per =

