Name _____ Date _____

Modeling Phenomena with Trigonometric Functions - Matching Worksheet

Write the letter of the answer that matches the problem.

_____ 1. What is the amplitude of the function $y = 17cos\ (14x + 3)$

A) 9 B) 7 C) 14 D) 6

_____ 2. Calculate the amplitude of function $y = 14sin\ (\frac{3x}{5})$

_____ 3. Choose the following function which has the period of $\frac{\pi}{11}$.

A) $y = 6\cos\ (\frac{2x}{9})$ B) $y = 8tan\ (11x)$

C) $y = 6tan\ (11x + 11)$

_____ 4. What is the amplitude of the function $y = 19cos\ (15x)$

A)13 B) 19 C) 18 D) 20

_____ 5. Choose the following function which has the period of $\frac{\pi}{4}$.

A) $y = 2\cos\ (\frac{6x}{9})$ B) $y = 4cos\ (8x + 9)$

C) $y = 8sin\ (\frac{3x}{7})$ D) $y = 5tan\ (\frac{6x}{7})$

_____ 6. Choose the following function which has the period of $\frac{\pi}{15}$.

A) $y = sin\ (\frac{11x}{16})$ B) $y = 7cos\ (\frac{7x}{7})$

C) $y = 7\tan(15x + 15)$

a. $y = 4cos\ (8x + 9)$

b. 17

c. 19

d. $y = 7\tan(15x + 15)$

e. 14

f. $y = 6tan\ (11x + 11)$