

Name _____

Mrs. Roubos

Date _____

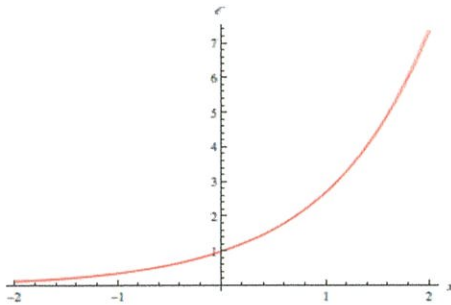
8A Period _____

Do Now

1) The function $g(x) = 5x - 1$ is defined on the domain $4 \leq x \leq 7$. Give the range of this function.

2) Multiply: $\frac{1}{2}x^2(4x^2 - 5x + 3)$

3) Is the following a function?



4) Solve the inequality below. Then state the greatest possible integer value for x in the solution set.

$$2(6x + 2) < 6x + 16$$

5) a) Peggy enrolled herself in a local gym. Her monthly plan will charge her a \$45 fee and an additional \$32 per month for each extra person she brings. Write a function which describes her monthly cost c , as a function of extra people, e .

b) Using the function you wrote, what would her bill be for a month that she brought 3 extra people.

6) What is the equation of a line in point-slope form with a slope of 4, that passes through the point $(-7, 3)$?

7) Simplify: $(4x^2 - 3x + 2) - (2x^2 + 7x - 5)$

8) Simplify: $(x - 8)^2$

9) Factor: $x^2 - x - 30$

10) Factor: $100x^2 - 9$

11) Factor completely: $3x^3 - 27x$

12) Solve for x: $4(xy + 2) = 15$

13) Solve for x: $\frac{x-3}{4} + \frac{1}{8} = \frac{5}{8}$