Name ______ Period ______ Date ______ Period ______

Semester Exam Questions #12-21-----CLASSWORK

What is the equation of the function? 12.



Find the rate of growth or decay for the 16. function $f(x) = (0.8)^{x}$.

For questions 17-18, classify each number as rational or irrational.

 $\sqrt{7}$ 17.

 $\sqrt{20} \cdot \sqrt{5}$ 18.

Are rational numbers closed under 19. multiplication?

- 20. graph???? SKIP
- 21. Use the diagram of the quadrilateral below.



Which expression represents the perimeter of the quadrilateral?

Solve the equation $x^2 = 63$ 13.

Factor $9x^{2} + 42x + 49$ 14.

15. The area of a white board is represented by $x^{2} + 2x - 15$. Find the length and width of the board.

Semester Exam Questions #12-21-----HOMEWORK

12. What is the equation of the function?



16. Find the rate of growth or decay for the function $f(x) = (1.03)^x$.

For questions 17-18, classify each number as rational or irrational.

17. $\sqrt{3}$

18. $\sqrt{18} \cdot \sqrt{2}$

19. Are rational numbers closed under addition?

20. SKIP

21 Use the diagram of the quadrilateral below.



Which expression represents the perimeter of the quadrilateral?

13. Solve the equation $x^2 = 104$

14. Factor $16x^2 + 72x + 81$

15. The area of a white board is represented by $x^2 + x - 20$. Find the length and width of the board.