Review Unit 2

Agenda

Warm-Up

HW Check

Structured Review Time

Reminders

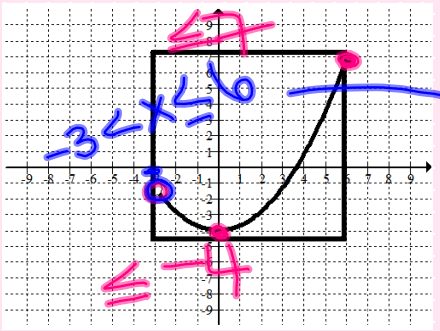
Test & Notebook Check tomorrow!

HW 1.6 & 2.1 due Friday last call

Read-It day Friday

Warm-Up Wednesday

1. Which best describes the range of the graph below?



A. $\{y \mid -4 < y < 7\}$

B. $\{x \mid -3 < x \leq 6\}$

C. $\{y \mid -4 \leq y \leq 7\}$

D. $\{x \mid -4 \leq x \leq 7\}$

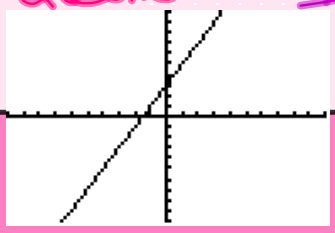
2. What is the **parent function** of y=2x+3?

A. $y = x$

B. $y = x^2$

C. $y = 2x$

D. $y = x + 3$



Algebra I - Unit 2: Topic 2 – Situation Graphs

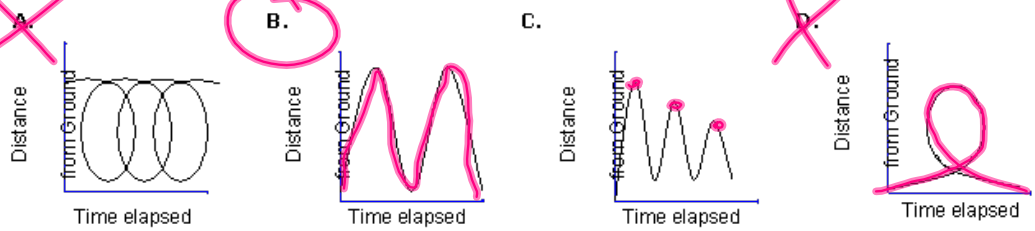
Practice – Situation Graphs pp 230-235

Name _____ Date _____ Period _____

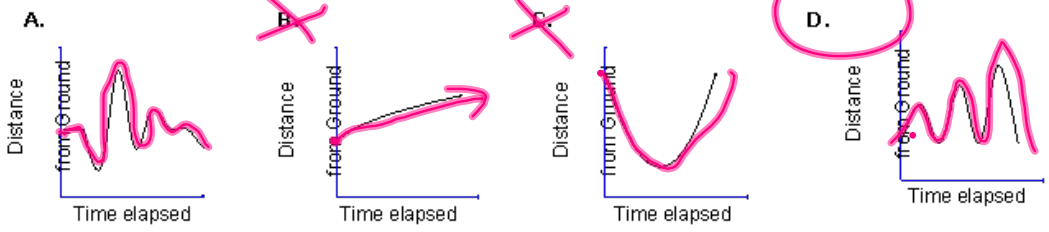
Indicate which graph matches the statement.

1. A train pulls into a station and lets off passengers.

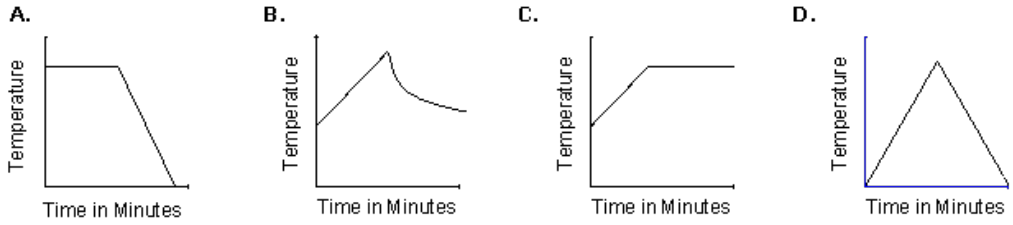
2. A man takes a ride on a Ferris wheel.



4. A child swings on a swing.



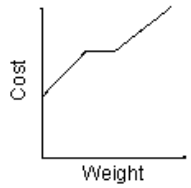
5. Water is boiled and then allowed to sit at room temperature.



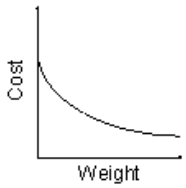
Algebra I - Unit 2: Topic 2 – Situation Graphs

6. Cost of a bag of potatoes depends upon its weight.

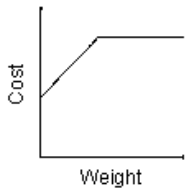
A.



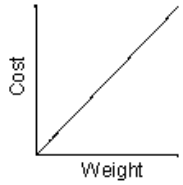
B.



C.

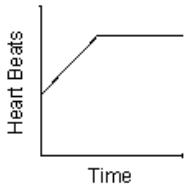


D.

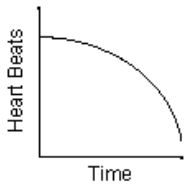


7. The heart rate of a person depends on how long he has been exercising.

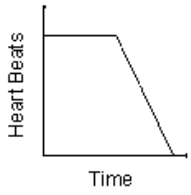
A.



B.



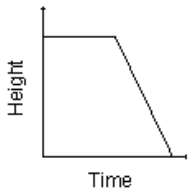
C.



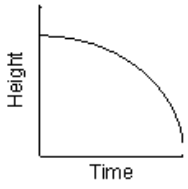
D.

8. A baseball is hit. Its height *h* is a function of time *t*.

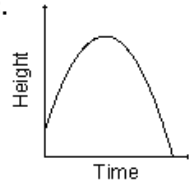
A.



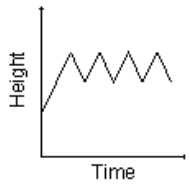
B.



C.

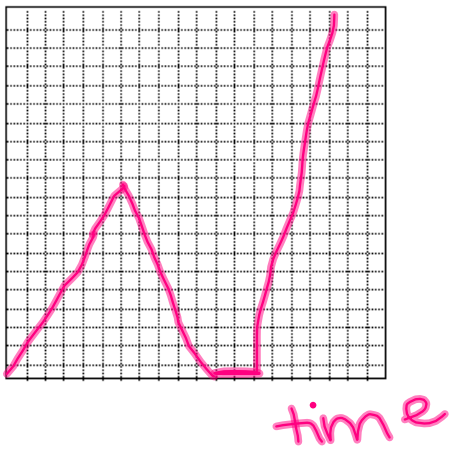


D.



Draw a graph that matches each situation. Give a label to each axis.

9. Sara walks from her home to the store. Halfway to the store, she realizes that she forgot to bring money, so she turns around, returns home, gets her money, and then walks all the way to the store. Graph time on the horizontal axis and distance from home on the vertical axis.



Reminders

Test & Notebook Check tomorrow!

HW 1.6 & 2.1 due Friday last call

Read-It day Friday

Review Unit 2

First 10

You will work through as much of the review with no notes, no help from neighbors or teachers. Highlight the problems you need help with.

Use this time wisely!

Next 10

You may use your notes, but still no help. Try those highlighted questions!

Next Next 10

You may use your neighbor! Explain how to do problems to each other.

Remaining

Foundations of Functions Review
Algebra 1: Unit 2

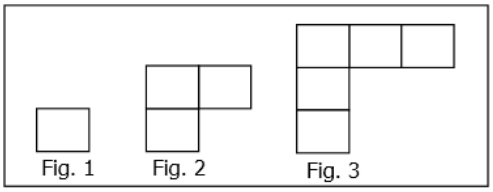
Name _____

We will work through the review together.
Remember: solutions are posted on twitter!

1. Use the sequence of shapes to answer the questions.

a. Draw the 9th figure.

2. Consider the pattern below:



What is the pattern rule?

3. If n represents a number's position in the sequence, write the first four numbers in the sequence described by the expression, $n(n-8)+3$.

_____ _____ _____ _____

4. Which expression can be used to find the nth term in the following sequence, where n represents a number's position in the sequence?

Position in Sequence	1	3	6	9	n
Term	5	9	15	21	

A. n + 4
B. 4n + 1
C. 2n + 3
D. 2n

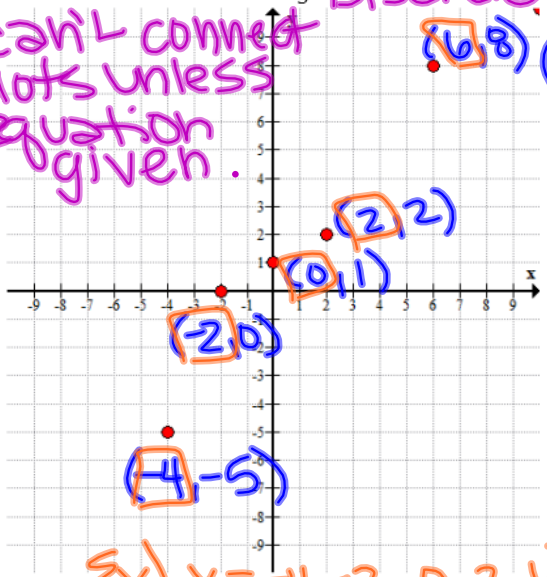
5. Given the pattern rule 4 + 5n what is the term number if it takes 154 blocks to build the pattern?

6. State the Domain and Range.

Discrete

can't connect dots unless equation given.

(6,8) (x,y)

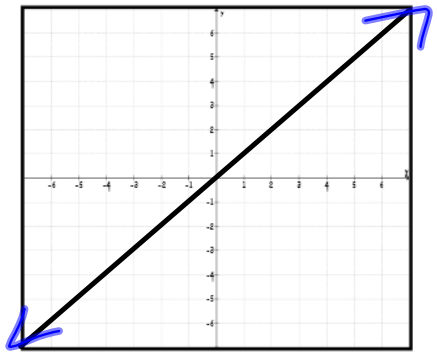


Domain: {x | x = -4, -2, 0, 2, 6}

Range: {y | y = -5, 0, 1, 2, 8}

① Linear Parent Function ② Quadratic Parent Function $y=x^2$

7. Graph the parent function $y = x$ on the graph below, and then state the domain & range.



D:

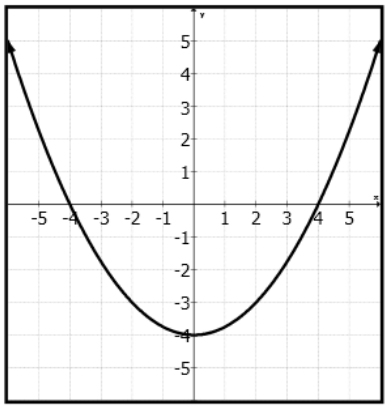
R:

8. Evaluate the following expression for x = -3

Parenthesis

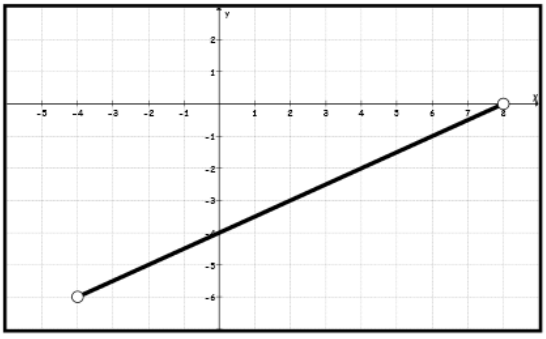
$X^2 + 3x + 12$

10. Which type of parent function is represented by the graph below?

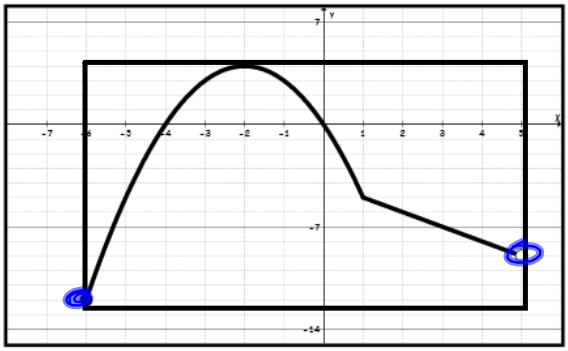


~~A~~ Exponential
~~B~~ Absolute Value
C Linear
D Quadratic

9. What is the range of the function shown on the graph?



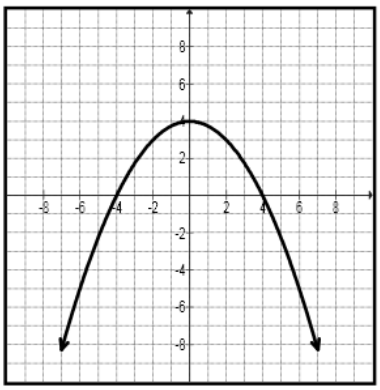
11. What is the domain of the function shown in the graph?



D: $\{x \mid -6 \le x < 5\}$

12. Maria wants to make a long-distance telephone call to her friend. She does not want to spend more than $6.50 on the telephone call. If there is a $0.20 connection fee and a charge of $0.24 per minute, write and graph an inequality that best represents this situation.

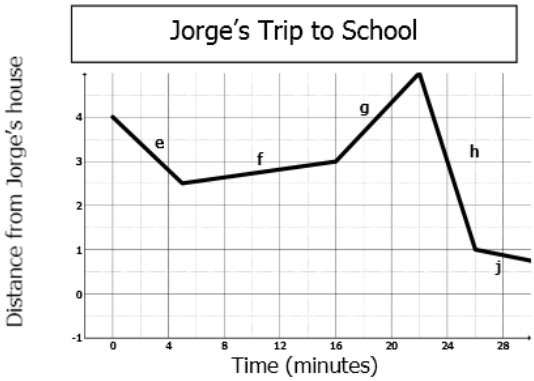
13. State the domain and range of the graph shown below.



D: _____

R: _____

14 – 15. OH NO. Jorge left his math homework in his locker! The graph below represents Jorge's car trip from his house to school and then back to his house. Each section of the graph represents part of Jorge's trip.



14. Which part of Jorge's trip was he going the slowest but not standing still?

flatter

f

15. During which part of the trip was Jorge traveling the fastest?

steep

h

16. During which part of the trip was Jorge at the school?

OMIT

17. State the domain and range of the following set of ordered pairs.

{(-3, 6), (0, 4), (3, 5), (-2, -6), (1, 10)}

Domain: _____

Range: _____

Continuous or discrete?

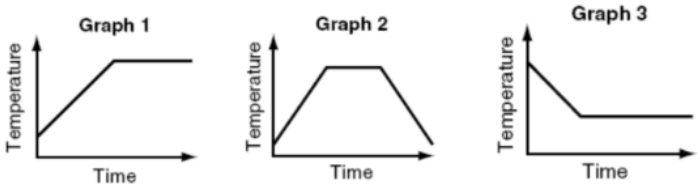
18. Solve the following equation for y

$$x = \frac{y+3}{z}$$

19. The formula for density is $D = \frac{m}{V}$. Solve the the equation for V.

20. Write the equation that can be used to find the measure of two supplementary angles, where the measure of one angle is 5 more than triple the other.

Choose the graph that best represents the situation.



21. Rebekah turns on the oven and sets it to 300°F. She bakes a tray of cookies and then turns the oven off.

A. Graph 1
B. Graph 2
C. Graph 3

22. Leon puts ice cubes in his soup to cool it down before eating it.

A. Graph 1
B. Graph 2
C. Graph 3

23. Baylee has the flu and her temperature rises slowly until it reaches 101°F.

A. Graph 1
B. Graph 2
C. Graph 3