

READY, SET, GO!

Name

Period

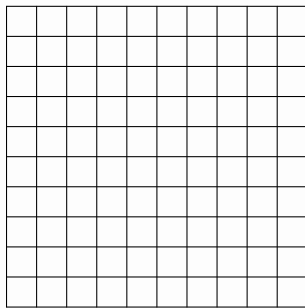
Date

READY

Topic: Graphing Linear and Exponential Functions

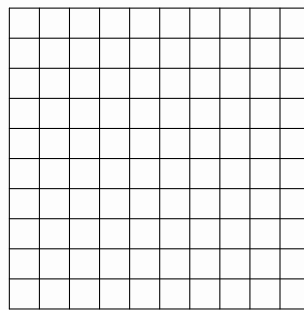
Graph each of the functions. Name 3 points that lie on each graph. Choose a scale for your graph that will make it possible to graph your 3 chosen points.

1. $f(x) = -2x + 5$



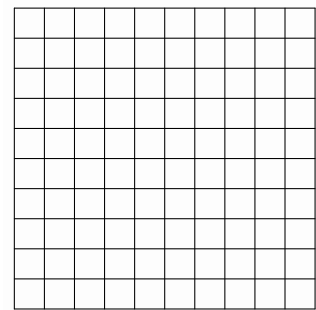
3 points:

2. $g(x) = 4 - 3x$



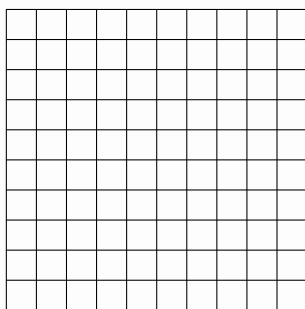
3 points:

3. $h(x) = 5(3)^x$



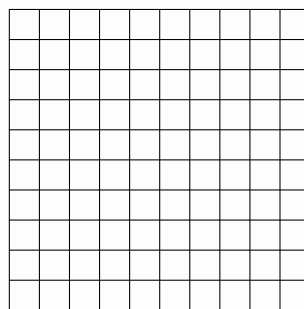
3 points:

4. $k(x) = 4(2)^x$



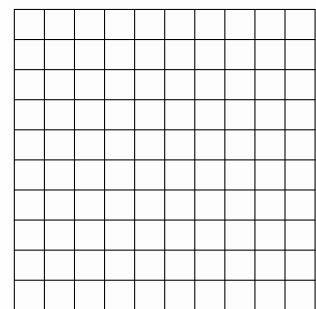
3 points:

5. $v(t) = 2.5t - 4$



3 points:

6. $f(x) = 8(3)^x$



3 points:

SET

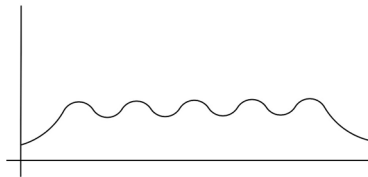
Topic: Describing attributes of a functions based on graphical representation

For each graph given match it to the contextual description that fits best. Then label the independent and dependent axis with the proper variables.

Graphs

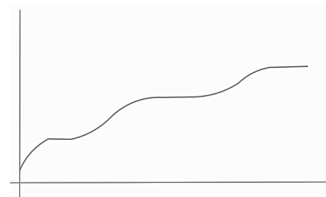
Contextual Descriptions

7.



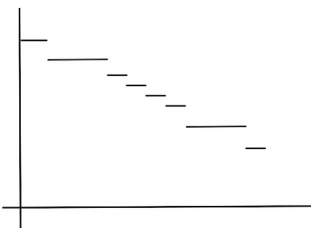
a. The amount of money in a savings account where regular deposits and some withdrawals are made.

8.



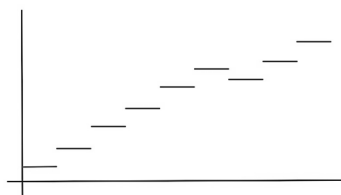
b. The temperature of the oven on a day that mom bakes several batches of cookies.

9.



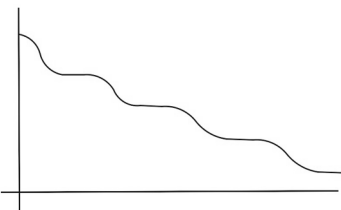
c. The amount of gasoline on hand at the gas station before a tanker truck delivers more.

10.



d. Watermelons are delivered to a farmer's market every Saturday morning. The number of watermelons available for sale on Thursday.

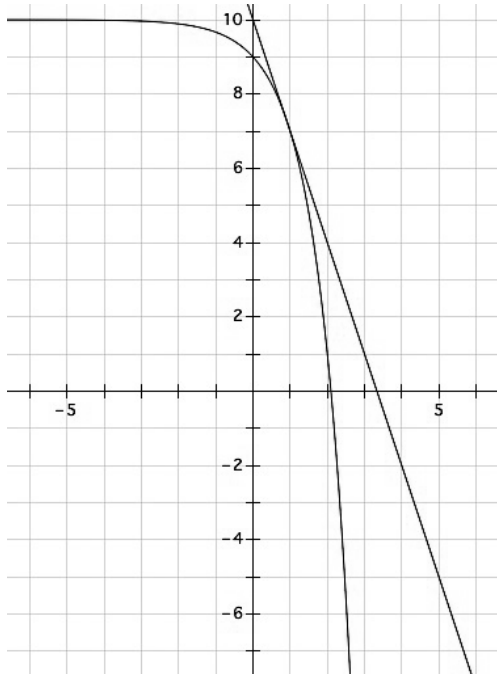
11.



e. The amount of mileage recorded on the odometer of a delivery truck over a time period.

Given the pair of graphs on each coordinate grid, create a list of similarities the two graphs share and a list of differences. (Consider attributes like, continuous, discrete, increasing, decreasing, linear, exponential, restrictions on domain or range, etc.)

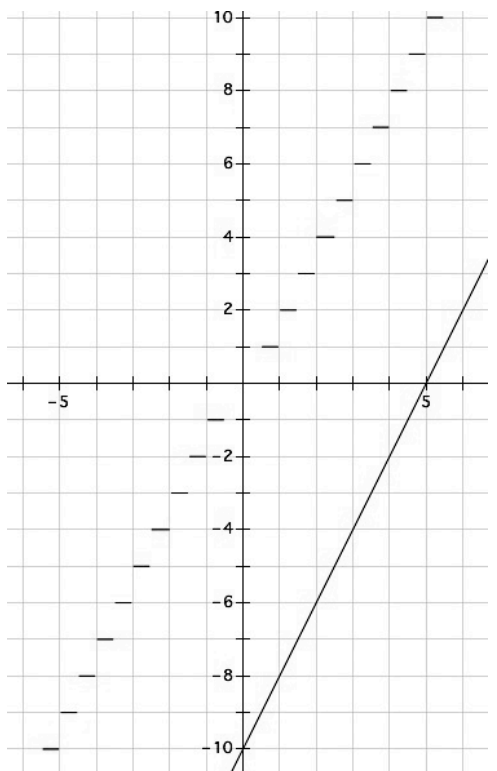
12.



Similarities:

Differences:

13.



Similarities:

Differences:

GO

Topic: Solving equations

For each equation find the value of x that makes it true. (Hint for #20 and #22: when solving a linear equation, you need to get the term containing the variable alone on one side. When solving an exponential equation, you also need to get the term containing the variable alone on one side.)

14. $10^x = 100,000$

15. $3x + 7 = 5x - 21$

16. $-6x - 15 = 4x + 35$

17. $5x - 8 = 37$

18. $3^x = 81$

19. $3x - 12 = -4x + 23$

20. $10 = 2^x - 22$

21. $243 = 8x + 3$

22. $5^x - 7 = 118$