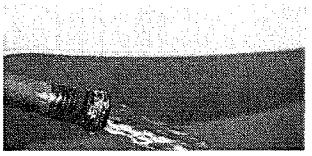
Ready, Set, Go!



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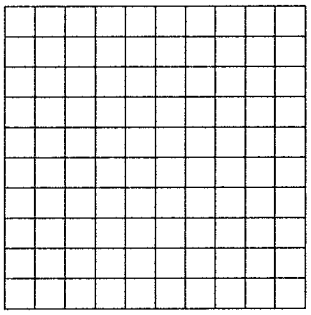
Ready

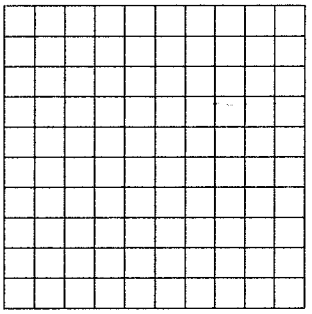
Topic: Graphing linear and exponential functions

Graph each of the functions.

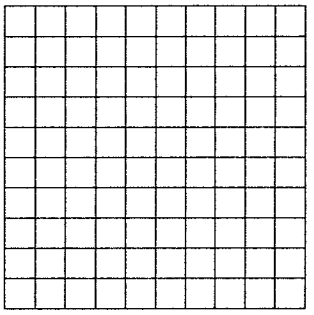
1. $f(x) = -2x + 5$



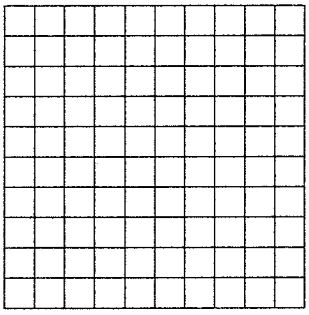
2. $g(x) = 4 - 3x$



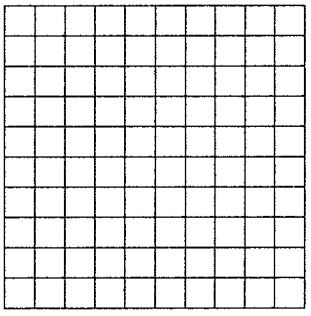
3. $h(x) = 5(3)^x$



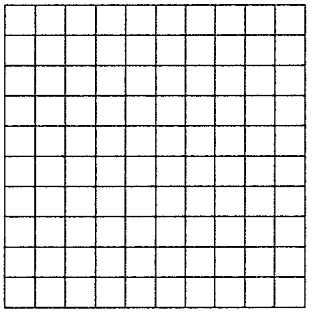
4. $k(x) = 4(2)^x$



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



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



Set

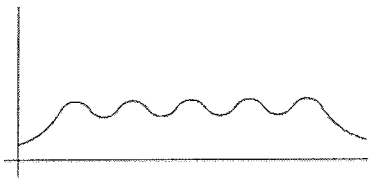
Topic: Describing attributes of a function based on the graphical representation.

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

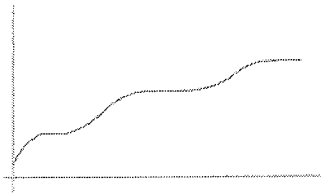
Graphs

Contextual Descriptions

____ 7.



____ 8.



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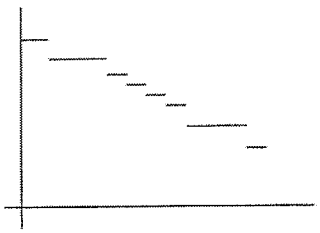
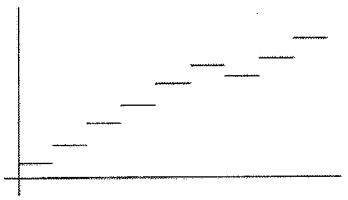
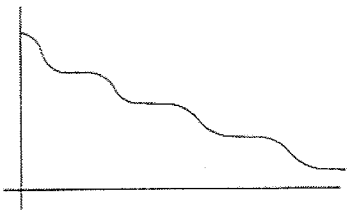


____ 10.



____ 11.



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

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

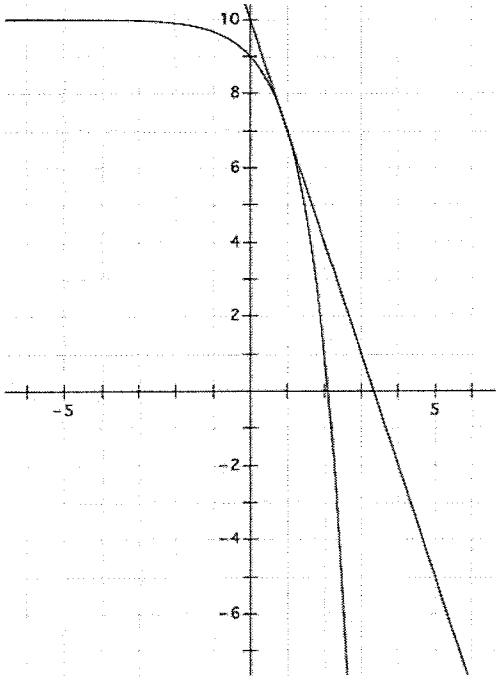
c. The amount of gasoline on hand at the gas station before a tanker truck delivers more.

d. The number of watermelons available for sale at the farmer's market on Thursday.

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.)

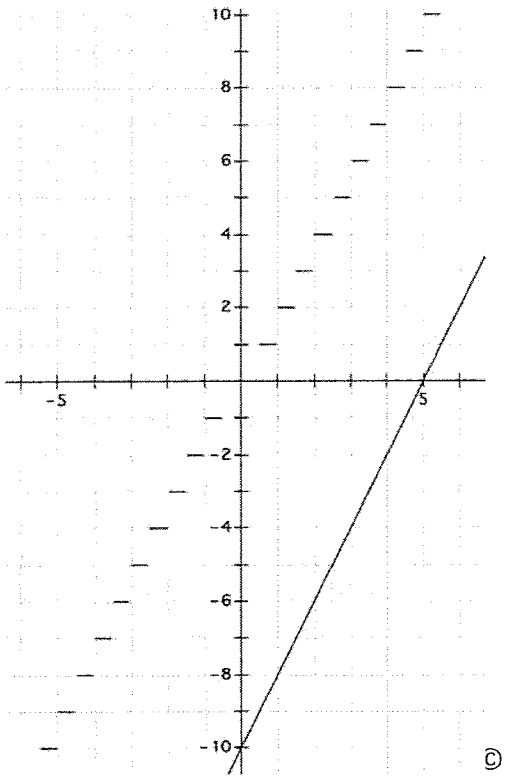
12.



Similarities:

Differences:

13.



Similarities:

Differences:

Go

Topic: Solving Equations

Find the value of *x* in each equation.

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. $5^x - 7 = 118$