

READY, SET, GO!

Name _____

Period _____

Date _____

READY**Write a recursive function for each explicit function.**

1. $f(x) = 3x - 5$

2. $g(x) = 3^x \cdot 5$

Write an explicit function for each recursive function.

3. $f(x) = f(x - 1) \cdot \frac{1}{2}, f(1) = 30$

4. $g(x) = g(x - 1) + \frac{1}{2}, f(1) = 30$

Write a recursive and explicit equation to represent each situation.

5. Jerry opens an account with \$2,000 that earns 6.5% interest per year.

7. Jason retires and has 350,000 in his savings account. He spends 20% of the amount in his savings per month.

6. Jenny is draining her pool at a rate of 13% per minute. It started with 2,500 gallons of water.

8. Juan invests \$20,000 into an account that earns 9% interest per year.

SET**Fill in the blanks for each table; then write the recursive and explicit equation for each sequence.**9. **Table 1**

x	1	2	3	4	5
y	5	7	9		

Recursive: _____

Explicit: _____

10. **Table 2**

x	y
1	82
2	84
3	86
4	
5	

Recursive:

Explicit:

11. **Table 3**

x	y
1	3
2	9
3	27
4	
5	

Recursive:

Explicit:

12. **Table 4**

x	y
1	27
2	9
3	3
4	
5	

Recursive:

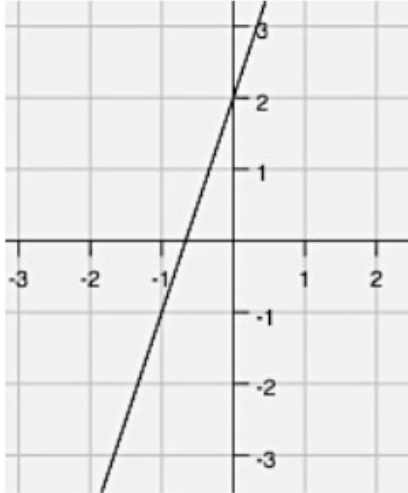
Explicit:

GO

Write each equation of the line in $y = mx + b$ form. Name the value of m and b .

Recall that m is the slope or rate of change and b is the y -intercept.

13.

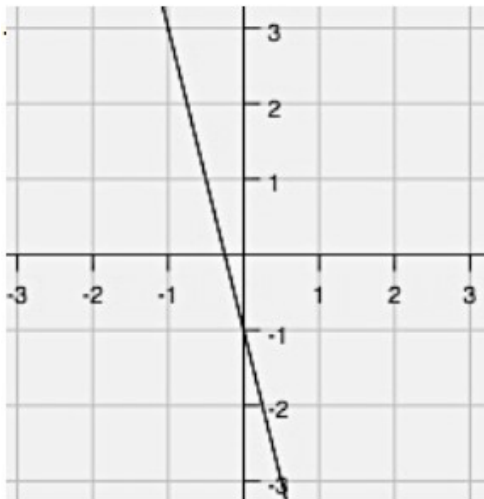


$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

Equation:

14.



$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

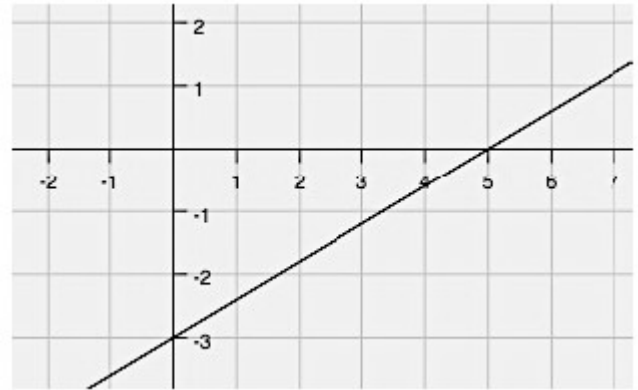
Equation:

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15.

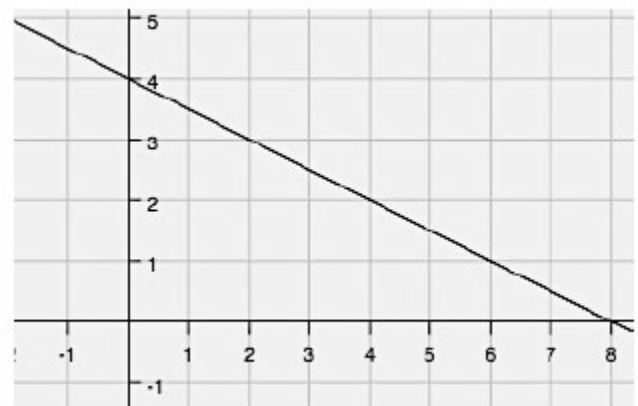


$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

Equation:

16.



$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

Equation: