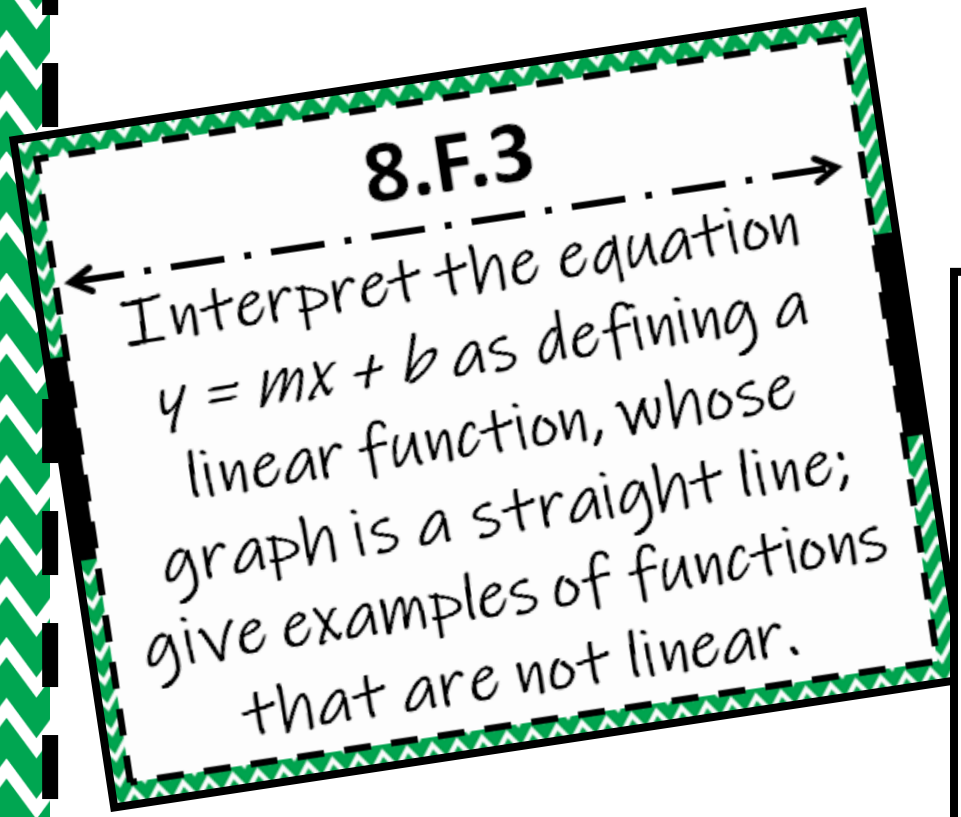
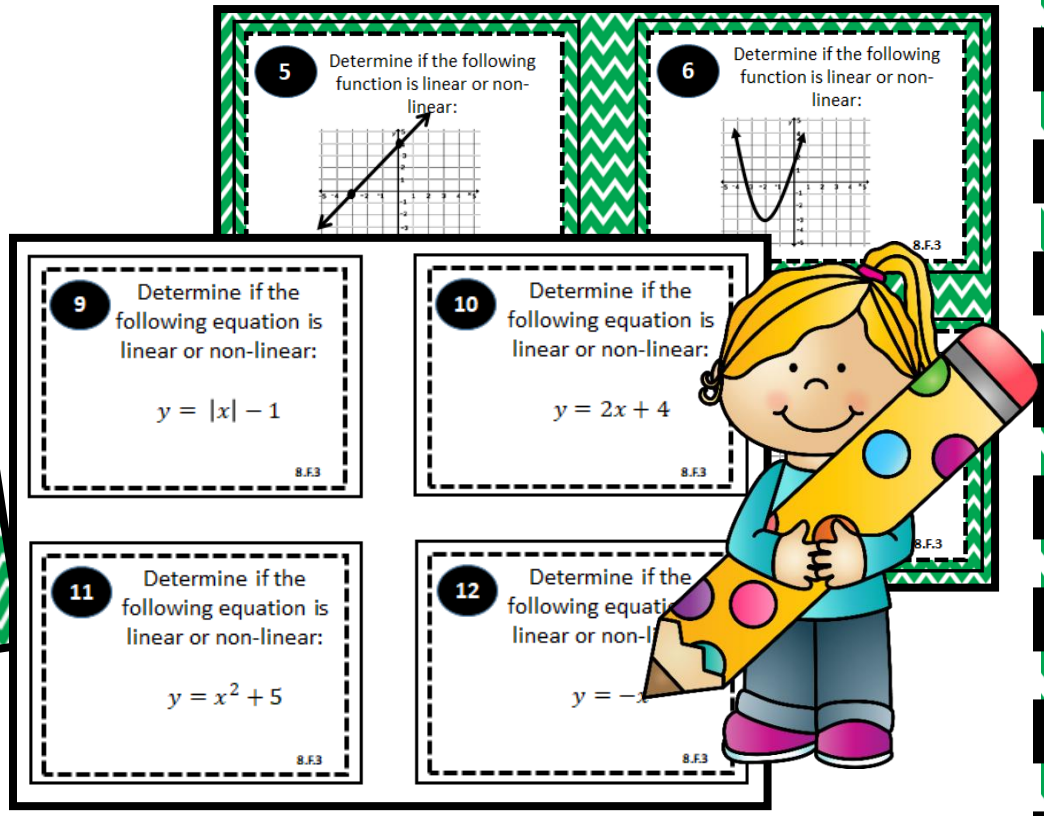
Functions: Task Cards 8.F.3

20 Task Cards, Recording Sheet, Answer Sheet





Created by:

Math in the Midwest

8.F.3

Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.

1

True or False

A function whose graph is a straight line is linear.

8.F.3

2

True or False

Every line is a linear function.

8.F.3

3

True or False

Linear functions can either be proportional or non-proportional.

8.F.3

4

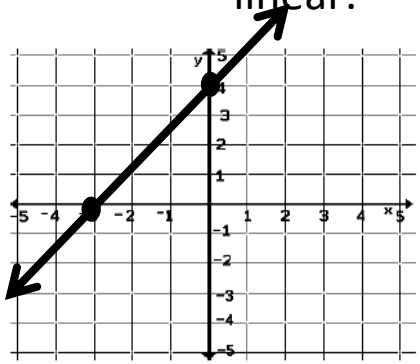
True or False

When both values of a function increase together the function is called a decreasing function.

8.F.3

5

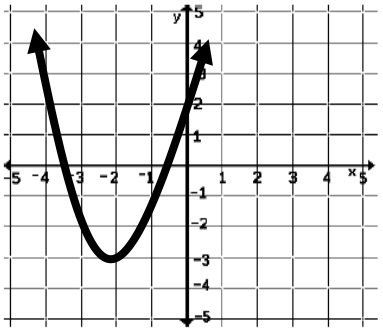
Determine if the following function is linear or non-linear:



8.F.3

6

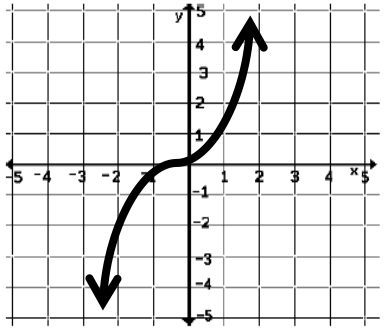
Determine if the following function is linear or non-linear:



8.F.3

7

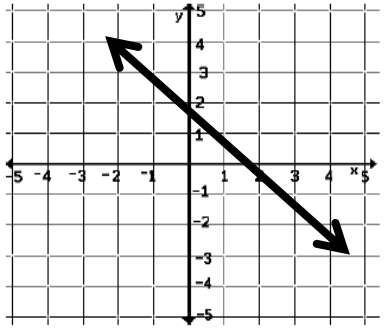
Determine if the following function is linear or non-linear:



8.F.3

8

Determine if the following function is linear or non-linear:



8.F.3

9

Determine if the following equation is linear or non-linear:

$$y = |x| - 1$$

8.F.3

10

Determine if the following equation is linear or non-linear:

$$y = 2x + 4$$

8.F.3

11

Determine if the following equation is linear or non-linear:

$$y = x^2 + 5$$

8.F.3

12

Determine if the following equation is linear or non-linear:

$$y = -x$$

8.F.3

13

When both values of a function increase together, the function is called an

_____

function.

8.F.3

14

When the value of the dependent variable decreases as the independent variable increases the function is called a

_____

function.

8.F.3

15

Write the equation of a linear function with slope m, initial value b, independent quantity x, and dependent quantity y.

8.F.3

16

A cell phone company charges a $20 fee every month and $0.01 for ten minutes spent talking on the phone. Write an equation to model the cost of a monthly cell phone bill for the linear function.

8.F.3

17

Write an equation that shows the slope is -2 and the y intercept is 3.

8.F.3

18

Write an equation that shows the slope is $\frac{1}{4}$ and the y intercept is -2.

8.F.3

19

Write an equation that shows the slope is 1 and the y intercept is 0.

8.F.3

20

Write an equation that shows the slope is 5 and the y intercept is 1.

8.F.3

21

8.F.3

22

8.F.3

23

8.F.3

24

8.F.3

1

True or False

A function whose graph is a straight line is linear.

8.F.3

2

True or False

Every line is a linear function.

8.F.3

3

True or False

Linear functions can either be proportional or non-proportional.

8.F.3

4

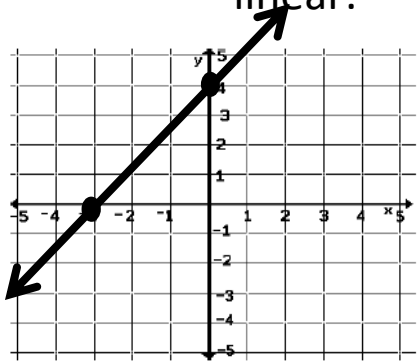
True or False

When both values of a function increase together the function is called a decreasing function.

8.F.3

5

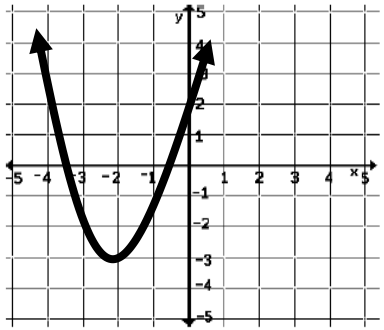
Determine if the following function is linear or non-linear:



8.F.3

6

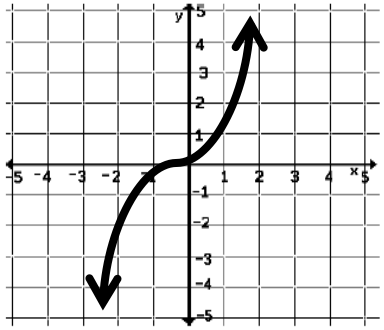
Determine if the following function is linear or non-linear:



8.F.3

7

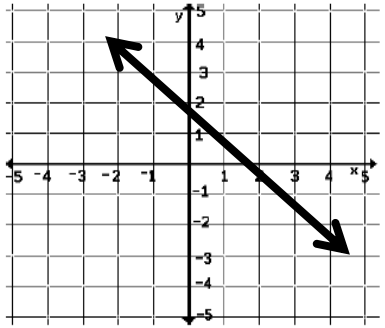
Determine if the following function is linear or non-linear:



8.F.3

8

Determine if the following function is linear or non-linear:



8.F.3

9

Determine if the following equation is linear or non-linear:

$$y = |x| - 1$$

8.F.3

10

Determine if the following equation is linear or non-linear:

$$y = 2x + 4$$

8.F.3

11

Determine if the following equation is linear or non-linear:

$$y = x^2 + 5$$

8.F.3

12

Determine if the following equation is linear or non-linear:

$$y = -x$$

8.F.3

13 When both values of a function increase together, the function is called an

_____

function.

8.F.3

14 When the value of the dependent variable decreases as the independent variable increases the function is called a

_____

function.

8.F.3

15 Write the equation of a linear function with slope m, initial value b, independent quantity x, and dependent quantity y.

8.F.3

16 A cell phone company charges a $20 fee every month and $0.01 for ten minutes spent talking on the phone. Write an equation to model the cost of a monthly cell phone bill for the linear function.

8.F.3

17

Write an equation that shows the slope is -2 and the y intercept is 3.

8.F.3

18

Write an equation that shows the slope is $\frac{1}{4}$ and the y intercept is -2.

8.F.3

19

Write an equation that shows the slope is 1 and the y intercept is 0.

8.F.3

20

Write an equation that shows the slope is 5 and the y intercept is 1.

8.F.3

21

8.F.3

22

8.F.3

23

8.F.3

24

8.F.3

Name _____ Hour _____

8.F.3 Recording Sheet

1.	2.	3.
4.	5.	6.
7.	8.	9.

Name _____ Hour _____

10.	11.	12.
13.	14.	15.
16.	17.	18.
19.	20.	

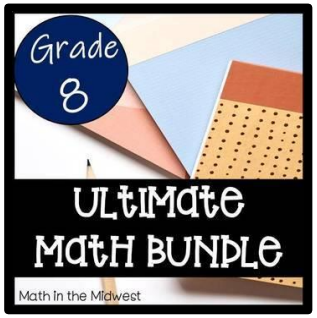
Answer Key

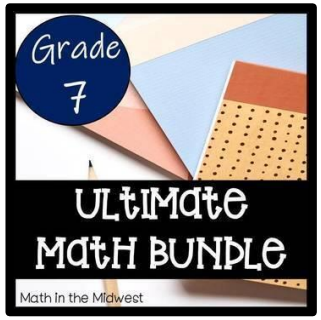
Number	Answer
1	True
2	False
3	True
4	False
5	Linear
6	Non-linear
7	Non-linear
8	Linear
9	Non-linear
10	Linear

Number	Answer
11	Non-linear
12	Linear
13	Increasing
14	Decreasing
15	$y = mx + b$
16	$y = .01x + 20$
17	$y = -2x + 3$
18	$y = \frac{1}{4}x - 2$
19	$y = x$
20	$y = 5x + 1$

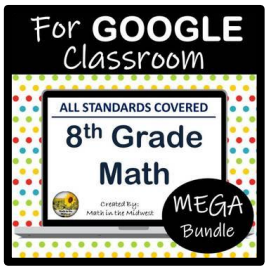
Check out my other products!

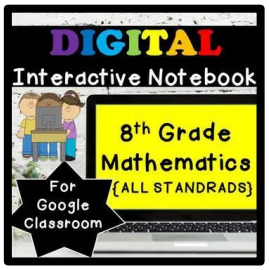
Ultimate Bundles:

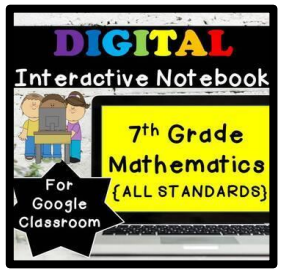




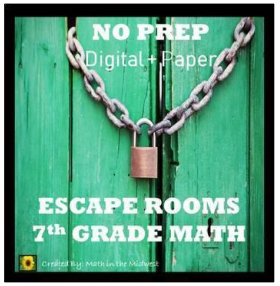
Digital Bundles:

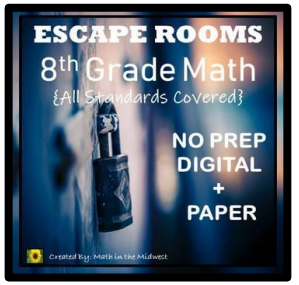


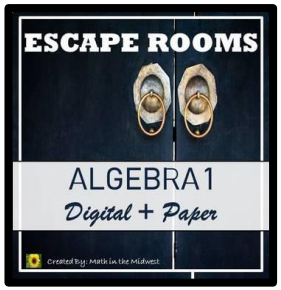




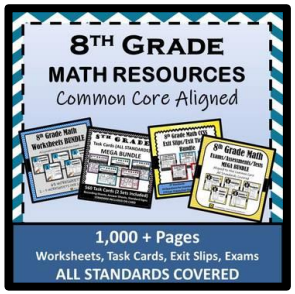
Escape Rooms:

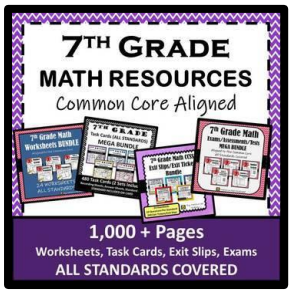






PDF Bundles:





Visit my store & follow me!

https://www.teacherspayteachers.com/Store/Math-In-The-Midwest

Terms of Use

Terms of Use Permission is granted to copy pages specifically for student or teacher use only by the original purchaser or licensee. The reproduction of this product for any other use is strictly prohibited. Copying any part of the product and placing it on the Internet is strictly prohibited. Doing so violates the Digital Millennium Copyright Act (DMCA).

Be the first to know about my new discounts, freebies, and product launches. Click the link below to become a follower!

https://www.teacherspayteachers.com/Sellers-Im-Following/Add/Math-In-The-Midwest

Get TpT Credit on Future Purchases by:

- Leaving feedback on the products you purchase. TpT gives you feedback credits that you use to lower the cost of your future purchases. I truly love hearing what you think about my products so please consider leaving feedback! Thank you ☺

Credit & many thanks to: