

Final Exam Review: Coloring Activity DUE 12/12

1. Jill has a \$30 gift certificate for a movie rental. Each time she rents a movie, \$6 is deducted from her gift certificate balance. If m represents the number of movies Jill rents, which of these expressions can be used to determine her gift certificate balance?

- A $30m - 6$ White
B $30m + 6$ Red
C $30 + 6m$ Blue
D $30 - 6m$ Green

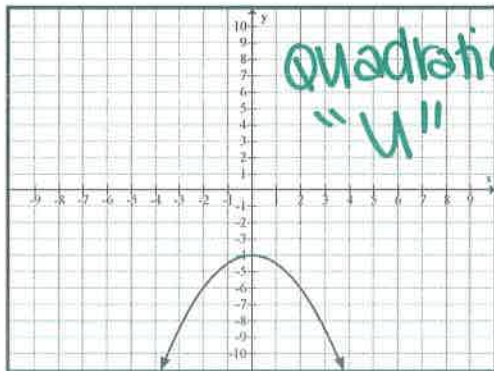
$30 - 6m$

2. Julie opened a checking account with a \$50 deposit. Each month she earns \$60 tutoring math, of which she spends \$22 per month. She deposits the rest of her earnings into her checking account. Which expression best represents how much money Stephanie should have in her checking account after m months?

- A $50 + (60 - 22)m$ Purple
B $50 + 22m$ Pink
C $50 + 60m$ Light Blue
D $50 + 60m - 22$ Yellow

$50 + (60 - 22)m$

3. Which function is the parent function of the graph below?



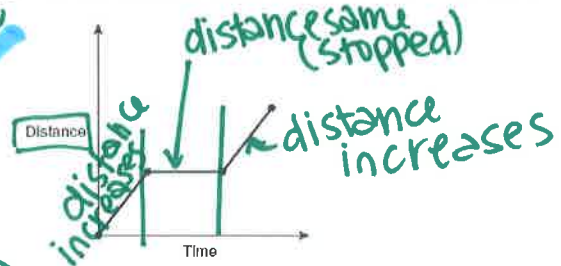
- A $y = x$ Pink
B $y = x - 4$ Light Green
C $y = x^2$ Red
D $y = -x^2 - 4$ Blue

4. Marcy deposits \$550 in a savings account at 3% simple annual interest. The value of this account, v , is given by the function $v = 550 + 16.5t$, in which t is the number of years the money is in the bank. What is the range of this function?

- A $0 \leq v \leq 550$ Yellow
B $v \geq 550$ Light Green
C $v \leq 550$ Black
D $0 \leq v \leq 16.5$ Gray

y
value of account
always \$550
or MORE.

5. Which situation could this graph best represent?



- A A boy ran for 10 minutes, rested on a bench for 15 minutes, and then ran for 10 more minutes. (Blue)
B A boy ran for 10 minutes, walked for 15 minutes, and then ran for 10 more minutes. (Red)
C A boy ran for 10 minutes, rested on a bench for 15 minutes, and then walked for 10 more minutes. (Gray)
D A boy walked for 10 minutes, ran for 15 minutes, and then walked for 10 more minutes. (Brown)

same speed both times

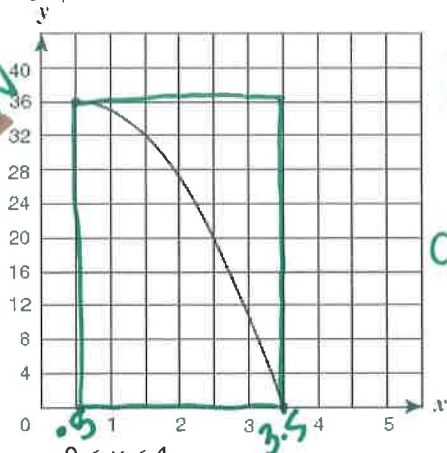
6. Kim has determined that when she reads at a rate of 4 pages per minute, the relationship between the number of pages she reads, p , and the time she spends reading, t , is described by the relationship $p = 4t$. Which best represents the dependent quantity in this situation?

- A The rate of pages read depends on the number of pages read. (Light Blue)
B The rate of pages read depends on the time spent reading. (Yellow)
C The number of pages read depends on the time spent reading. (Black)
D The time spent reading depends on the number of pages read. (Orange)

output

P

7. Which of the following are the domain and range for the graph shown below?



- ☒ $0 \leq x \leq 4$
☒ $0 \leq y \leq 36$

Pink

- ☒ $0 \leq x \leq 36$
☒ $0.5 \leq y \leq 3.5$

Peach

- ☐ $0.5 < x < 3.5$
☐ $0 < y < 36$

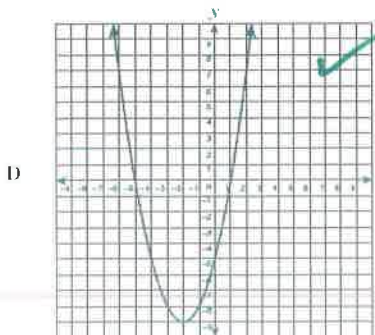
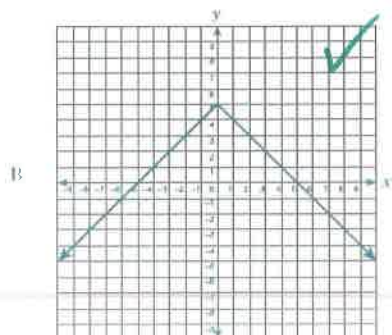
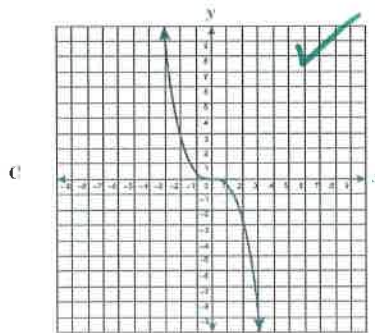
Light Blue

- ☒ $0.5 \leq x \leq 3.5$
☒ $0 \leq y \leq 36$

Light Brown

10. Which of the following graphs does not represent y as a function of x ?

- a. Blue
 b. Yellow
 c. Orange
 d. Black



8. Which set of ordered pairs represents a function?

- ☒ A. (3, 10), (5, -4), (7, 10), (-4, 0), (6, 14)
☐ B. (5, 10), (8, 8), (13, 57), (18, 5), (21, 8)
☒ C. (-7, -4), (4, -4), (0, 0), (1, 1), (3, 3), (7, 7)
☒ D. (35, -6), (16, -4), (4, -2), (4, 2), (16, 4)

Yellow
 Light Pink
 Purple
 Light Brown

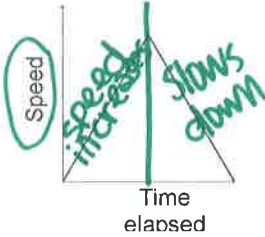
9. Which expression is equivalent to $-7(x-2) + 5(3-x) - 4x$?

- A. $-16x + 1$ Orange
 B. $-16x + 29$ Light Green
 C. $-2x + 1$ White
 D. $-12x + 13$ Red

$$-7x + 14 + 15 - 5x - 4x = -16x + 29$$

$$y - 4 = -3(x + 2)$$

11. The graph below best represents which of the following relationships between speed and time elapsed?



- ☒ Carol rides her bike steadily up the street and then takes a break and then quickly rides back (Orange)
- ☒ A woman climbs a hill at a steady pace and then starts to run down one side. (Pink)
- ☒ Mike runs up a hill and then runs back down the hill. (Light Brown)
- ☒ Bill rode his bicycle down a hill and then slowly came to a stop. (Light Green)

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

Term	1	3	6	9	n
Value	5	13	25	37	

- A. $n + 4$ Yellow
- B. $3n + 4$ Light Brown
- C. $5n$ Pink
- ☒ D. $4n + 1$ Purple

$$m = \frac{12}{3} = 4$$

or use STAT

13. Diego solved the following equation using the steps shown below.

- Step 1: $3x + 6 = x + 18$
- Step 2: $2x + 6 = 18$
- Step 3: $2x = 12$
- Step 4: $x = 6$

"baby to mama"

What operation did he perform to get from Step 1 to Step 2?

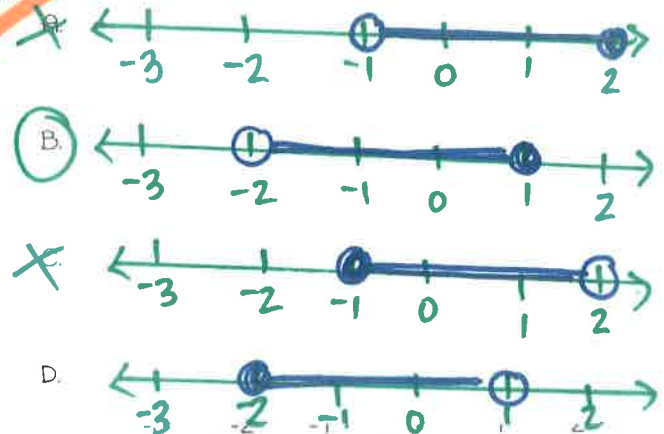
- A. Added x to both sides of the equation Black
- B. Divided both sides of the equation by 2 Green
- C. Multiplied both sides of the equation by 2 Yellow
- ☒ D. Subtracted x from both sides of the equation Light Blue

14. Write the equation of the line that passes through the point $(-2, 4)$ and has a slope of -3 , in standard form.

- ☒ A. $y = -3x - 10$
- ☒ B. $y = -3x - 2$
- ☒ C. $3x + y = -2$
- ☒ D. $-3x - y = 2$

$$3(-2) + 4 = -2 \checkmark$$

15. Which number line below matches the inequality $-1 \leq -3x + 2 < 8$?



$$\begin{array}{r} -1 \leq -3x + 2 < 8 \\ -2 \leq -3x < 6 \\ -\frac{2}{3} \leq -x < 2 \\ \frac{2}{3} \geq x > -2 \end{array}$$

FLIP

$$1 \geq x > -2$$

$$-2 < x \leq 1$$

15. ☒ a. Pink
- ☒ b. Orange
- c. Yellow
- d. Tan

Stay WARM
this winter!

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