

Math 1 IA2 Review Part I

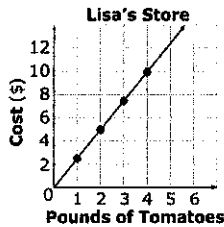
Name _____

1. The table below shows the cost of tomatoes at Roger's store.

Roger's Store

Pounds of Tomatoes	Cost
3	\$7.35
5	\$12.25
8	\$19.60

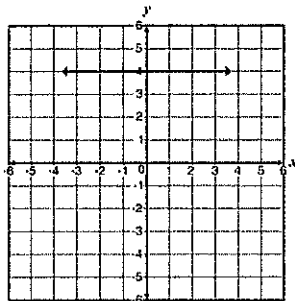
The graph below shows the cost of tomatoes at Lisa's store.



Which statement below is true?

- A. Roger's store is cheaper by \$0.05 per pound.
 - B. Roger's store is cheaper by \$0.15 per pound.
 - C. Lisa's store is cheaper by \$0.05 per pound.
 - D. Lisa's store is cheaper by \$0.15 per pound.
2. What is the range of the function $y = 4x - 1$ for the domain $4 \leq x \leq 8$?
- A. $\frac{5}{4} \leq y \leq \frac{9}{4}$
 - B. $1 \leq y \leq 2$
 - C. $15 \leq y \leq 31$
 - D. $16 \leq y \leq 32$

3. The horizontal line shown is a constant function.



What is the function's domain?

- A. 4
- B. all real numbers
- C. all real numbers greater than or equal to 0
- D. all real numbers greater than or equal to 4

4. Given the function $f(x) = x^2 - 2x - 3$, find $f(-3)$

- A. 6
- B. -1
- C. 12
- D. 18

5. Which statement represents another way to write the function rule, $y = 3x + 5$?

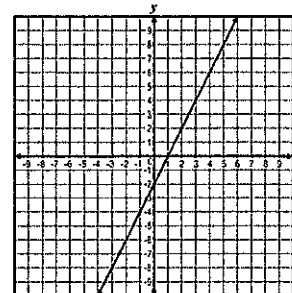
- A. $y = 3y + 5$
- B. $x = 3y + 5$
- C. $f(x) = 3x + 5$
- D. $f(y) = 3x + 5$

6. The grocery store where Ms. Maple works pays her \$6.50 per hour. Any time she works more than 40 hours per week, she is paid time and a half for the additional hours. Her weekly pay, w , is found using the following equation, where h is the total number of hours worked
- $$w = 6.50h + 0.5(6.50)(h - 40)$$

How much would Ms. Maple earn if she worked 43 hours one week?

- A. \$975.00
- B. \$399.75
- C. \$289.25
- D. \$279.50

7. What is the y-intercept of the line graphed below?

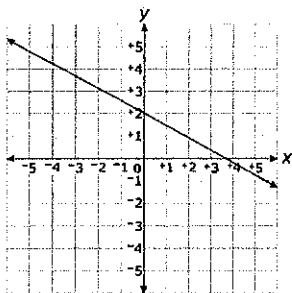


- A. -2
- B. 0
- C. 1
- D. 2

8. What are the x- and y-intercepts for the graph of the equation $y = 4 - 2x$?

- A. x-intercept = 4; y-intercept = -2
- B. x-intercept = -2; y-intercept = 4
- C. x-intercept = 2; y-intercept = 4
- D. x-intercept = 4; y-intercept = 2

9. Which choice is an equation of the line graphed below?



- A. $y = -2x + 2$ C. $y = \frac{1}{2}x + 2$
 B. $y = -\frac{1}{2}x + 2$ D. $y = 2x + 2$

10. What are the coordinates of the y-intercept of the graph of $y = 3x - 6$?

- A. (2, 0) C. (-6, 0)
 B. (0, 2) D. (0, -6)

11. The table below shows a pattern.

Term	1	2	3	4	5	n
Value	-1	2	7	14	23	?

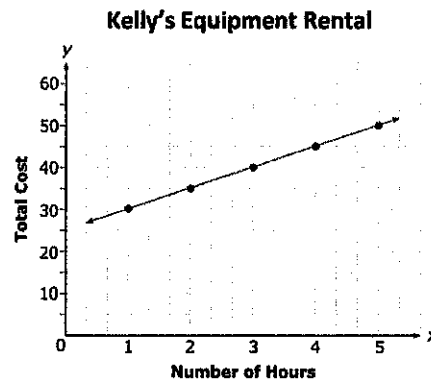
Based on the table, which expression represents the value of the n th term of the pattern?

- A. $n - 2$ C. $n^2 - 2$
 B. $4n + 3$ D. $n^2 + 2$

12. Leonard wrote the sequence of numbers below. 9, 15, 21, 27, ... Which expression did he use to form the sequence, where n is the term number?

- A. $3n + 3$ C. $6n + 3$
 B. $3n - 3$ D. $6n - 3$

13. Kelly's Equipment Rental and Wendy's Watersports charge by the hour to rent a kayak. The graph below shows the total cost to rent a kayak from Kelly's Equipment Rental based on different numbers of hours.



The total costs to rent a kayak from Wendy's Watersports are listed in the table below.

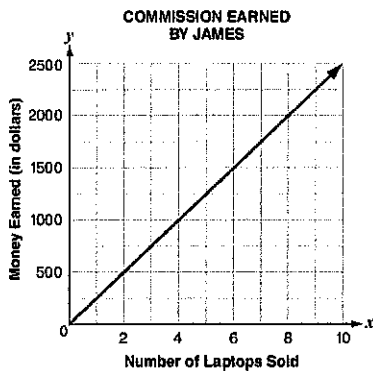
Wendy's Watersports

Hours	Cost
2	\$35
5	\$65
7	\$85

Who charges less per hour, and by how much?

- A. Kelly's Equipment Rental charges \$10 less per hour.
 B. Wendy's Watersports charges \$10 less per hour.
 C. Kelly's Equipment Rental charges \$5 less per hour.
 D. Wendy's Watersports charges \$5 less per hour.

14. Rhoda and James both sell laptops and earn commission based on the number of laptops sold. In one month, Rhoda earns \$2000 in commission for selling 10 laptops and has a base salary of \$600. The money James earns for selling laptops in the same month is shown in the graph below.



Which of these statements is true of the money Rhoda and James earn for selling laptops?

- A. Rhoda earns \$10 more than James for selling 10 laptops during the month.
 B. James earns \$500 more than Rhoda for selling 10 laptops during the month.
 C. James earns \$50 more in commission than Rhoda for each laptop sold.
 D. Rhoda earns \$600 more in commission than James for each laptop sold.
15. Green Taxi Company uses the equation $y = 1.75x + 4$ to calculate the total cost for a customer to ride x miles in one of their taxis. White Taxi company uses the table below to calculate the cost for a ride.

White Taxi Company

Miles (x)	Cost (y)
3	\$10.50
5	\$13.50
8	\$18.00

Which statement is true?

- A. Green Taxi charges \$0.25 less per mile than White Taxi.
 B. Green Taxi charges \$0.25 more per mile than White Taxi.
 C. Green Taxi charges \$2.00 less per mile than White Taxi.
 D. Green Taxi charges \$2.00 more per mile than White Taxi.

16. Which equation represents the line that has a slope of -2 and passes through the point (6, 5)?

- A. $y = -2x - 17$ C. $y = -2x + 16$
 B. $y = -2x - 16$ D. $y = -2x + 17$

17. What is the value of y if the slope of a line is -5 and two points on the line are (-1, 4) and (2, y)?

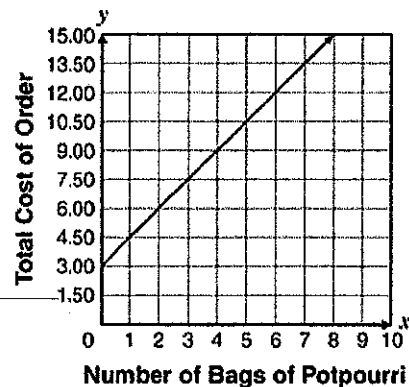
- A. -11 C. 9
 B. -1 D. 19

18. What is the equation of a line that passes through the point (-6, 5) and is parallel to the x -axis?

- A. $x = -6$ C. $y = x - 6$
 B. $y = 5$ D. $x = y - 5$

19. Which situation could the graph below best represent?

Alberto's Potpourri Sales



- A. Alberto sold bags of potpourri for \$1.50 per bag, plus a \$3.00 handling charge per order.
 B. Alberto sold bags of potpourri for \$3.00 per bag, plus a \$1.50 handling charge per order.
 C. Alberto sold bags of potpourri for \$1.50 per bag, plus a \$1.50 handling charge per order.
 D. Alberto sold bags of potpourri for \$3.00 per bag, plus a \$3.00 handling charge per order.