Kristy works at a toy store. Her base pay is $1000 a month. She also receives a commission of 2% of her total sales. The linear model representing her pay (p) in terms of her sales (s) is shown.

$$p = .02s + 1000$$

Using this model, what is Kristy's monthly pay for sales totaling $25,000?

A. $1,200,000

B. $5,100

C. $1,500

D. $500

The function $f(x) = 7x + 15$ models the time in minutes that a customer will wait to get an oil change if there are x cars in line ahead of the customer. How long will a customer wait if they are the fifth car in the line?

A. 28 minutes

B. 35 minutes

C. 43 minutes

D. 50 minutes

The degree measure of each internal angle of a regular polygon follows a mathematical rule which depends on the number of sides.

Triangle	Rectangle	Pentagon	Hexagon
3 sides	4 sides	5 sides	6 sides
60°	90°	108°	120°

What is the rule for a polygon with n sides?

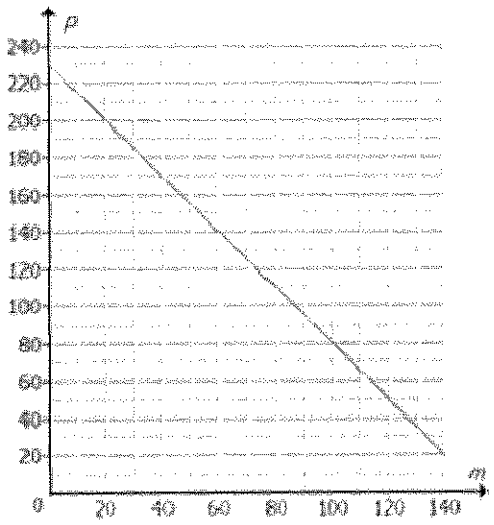
A. $\frac{90(n - 2)}{2n}$

B. $\frac{n}{180(n - 2)}$

C. $\frac{180(n - 2)}{n}$

D. $180n^2 - n$

The graph shows how many pages (p) Erin has left to read in her book after (m) minutes of reading.



How many pages were in the book when Erin started reading?

A. 140 pages

B. 150 pages

C. 230 pages

D. 240 pages

The cost of a class field trip is $15 per person, plus $50 for a bus ride. Which function can be used to find the total cost $C(x)$ of a field trip for x students?

A. $C(x) = 50x + 15$

B. $C(x) = 15x + 50$

C. $C(x) = 50x - 15$

D. $C(x) = 15x - 50$

A rectangle with a length of 12 and a width of 7 is similar to a rectangle with a length of 9. What is the width of the second rectangle?

A. 4

B. 5.25

C. 9.3

D. 15.4

A taxi charges a base fee of \$3.00 and \$.15 for every mile of the ride. What would be the cost of a 3.4 mile ride?

A. \$0.51

B. \$3.51

C. \$10.20

D. \$10.35

A tutoring agency charges \$20 for study materials, plus \$40 an hour for tutoring. Which function can be used to find the total cost $T(h)$ of h hours of tutoring?

A. $T(h) = 40(h + 20)$

B. $T(h) = 20(h + 40)$

C. $T(h) = 40h + 20$

D. $T(h) = 20h + 40$

A travel agency is advertising a vacation package that includes \$250 for airfare, plus \$40 a day for a hotel. The agency also offers the option of eating breakfast and lunch at the hotel for \$10 a day for the length of the hotel stay. Which function can be used to find the total cost $V(d)$ of staying d days and using the optional meal plan?

A. $V(d) = 40d + 260$

B. $V(d) = 50d + 250$

C. $V(d) = 250d + 50$

D. $V(d) = 260d + 40$

The cost of renting a bowling alley for a party is \$110, plus \$5 a person for food. Which function can be used to find the total cost $C(x)$ of a party at a bowling alley for x friends?

A. $C(x) = 5x + 110$

B. $C(x) = 110x + 5$

C. $C(x) = 5x - 110$

D. $C(x) = 110x - 5$

The cost of renting a moving van is $25 a day, plus $0.35 per mile driven. Which function can be used to find the total cost $C(x)$ in dollars of renting a van for a day and driving x miles?

A. $C(x) = 25x - 0.35$

B. $C(x) = 25x + 0.35$

C. $C(x) = 0.35x - 25$

D. $C(x) = 0.35x + 25$

If m varies directly with n, and $m = 8$ when $n = 24$. What is the value of n when $m = 12$?

A. 36

B. 15

C. 4

D. $\frac{1}{3}$

The cost of a phone bill varies directly with the amount of minutes talked. It costs $80 to talk for 50 minutes. How much does it cost to talk 120 minutes?

A. $192

B. $185

C. $180

D. $75

The table shows a relationship between x and y values.

Input (x)	Output(y)
4	16
5	19
6	22
7	25
9	31

Which equation *best* describes the rule for the x and y values in the table?

A. $y = 4x - 3$

B. $y = 3x - 4$

C. $y = 4x + 3$

D. $y = 3x + 4$

In a linear function, y varies directly with x, and the constant of variation is $\frac{1}{3}$. What is the value of y when $x = -\frac{3}{2}$?

A. $-\frac{1}{2}$

B. $-\frac{2}{9}$

C. $-\frac{9}{2}$

D. $-\frac{1}{9}$

The cost (c) to fill up a tank in a car varies directly with the number of gallons purchased (g). If gas costs $2.75 per gallon, which equation models the relationship between c and g?

A. $c = g + 2.75$

B. $c = 2.75 - g$

C. $c = 2.75g$

D. $c = \frac{g}{2.75}$

The sum of x and y numbers is 38. One number, x, is 22 less than y. What is the product of x and y?

A. 38

B. 64

C. 240

D. 900

Which equation models the situation in which y varies directly with x and x =12 when y = 4?

A. $y = \frac{1}{3}x$

B. $y = 3x$

C. $y = \frac{1}{8}x$

D. $y = 8x$