

Develop generalizations of the results obtained and the strategies used and apply them to new problem situations. 7MR3.3

149. Lia used the following process to find the slope of the line described by the equation $3y + 5x = 12$.

| | |
|--|-------------------------|
| Step 1: Subtract $5x$ from each side. | $3y = -5x + 12$ |
| Step 2: Divide each side by 3. | $y = -\frac{5}{3}x + 4$ |
| Step 3: The slope of $y = mx + b$ is m . | Slope is $-\frac{5}{3}$ |

According to Lia's method, which expression gives the slope of the line described by the equation $ax + by = c$?

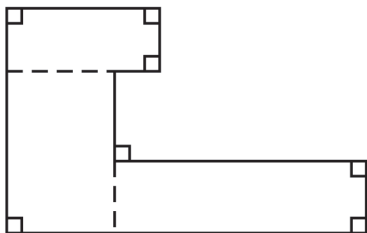
- A $-\frac{a}{b}$
- B $\frac{a}{b}$
- C $-\frac{b}{a}$
- D $\frac{b}{a}$

Len runs a mile in 8 minutes. At this rate how long will it take him to run a 26-mile marathon?

150. Which of the following problems can be solved using the same arithmetic operations that are used to solve the problem above?

- A Len runs 26 miles in 220 minutes. How long does it take him to run each mile?
- B A librarian has 356 books to place on 18 shelves. Each shelf will contain the same number of books. How many books can the librarian place on each shelf?
- C A cracker box weighs 200 grams. What is the weight of 100 boxes?
- D Each basket of strawberries weighs 60 grams. How many baskets can be filled from 500 grams of strawberries?

151. Mia found the area of this shape by dividing it into rectangles as shown.



Mia could use the same method to find the area for which of these shapes?

A

C

B

D