Exercises - Problem Solving with Equations

1

	Distance to Finish Line (meters)
Jason	$-8t + 200$
Mary	$-7.5t + 200$

Jason and Mary are running on a 200 meter track. The expressions in the table above show the distance to the finish line t seconds after they started the race. How many meters will Mary have left to finish the race when Jason is on the finish line?

A) 10.5 meters

B) 11.5 meters

C) 12.5 meters

D) 13.5 meters

2

At a bagel shop the first 6 bagels purchased cost 55 cents apiece, and additional bagels cost c cents apiece. If a customer paid $5.70 for 12 bagels, what is the value of c ?

A) 25

B) 30

C) 35

D) 40

3

Manny bought c candies at a price of 70 cents each. He sold all but k candies at a price of $1.25, and made a profit of p dollars. Which of the following represents p in terms of c and k ?

A) $p = 1.25(c - k) - 0.7c$

B) $p = 1.25c - 0.7k$

C) $p = 1.25c - 0.7(c - k)$

D) $p = 1.25(c - k) - 0.7k$

4

David used $\dfrac{1}{10}$ of his monthly salary for groceries and $\dfrac{3}{18}$ of his remaining money for his car payment. He also paid twice as much money for rent as for his car payment. If David has $1,620 left after paying for groceries, car payment, and rent, how much is his monthly salary?

A) $3,240

B) $3,320

C) $3,480

D) $3,600

5

In a school election, 680 students voted for one of two candidates for president. If the winner received 120 more votes than the loser, how many votes did the winner receive?

6

If a gas tank contains 15 liters of gas and is $\dfrac{3}{8}$ full, how many additional liters of gas are needed to fill up the tank?