

1. Find  $k$ :  $4 + 8k = -68$

2.  $6 + 6 \div 2 - 3 \times 2 = ?$

3. Peter mows his neighbor's lawns for \$15 per lawn. Peter took the money he made mowing lawns this week and bought a new DVD for \$20. He still has  $\frac{2}{3}$  of his mowing money left. How many lawns did he mow this week?

4. What is the area (in square inches) of a rug that is 17 inches wide and 2 feet long?

 in<sup>2</sup>

5. What is the fifth term of this sequence:  $\left\{1, \frac{1}{4}, \frac{1}{9}, \frac{1}{16}\right\}$ .

6. Julie took a 5 question, true or false quiz. She did not study for the quiz and guessed randomly on each question. What is the probability that she got all of the questions correct? Express your answer as a fraction.

7. Perry needs to drive exactly 8 hours to get to his home state of Alabama. Perry's car can travel 15 miles per gallon of gas and the price of gas is \$2.85 per gallon. How much will it cost for Perry to drive home if he drives at an average speed of 60 miles per hour?

8. The perimeter of a square tabletop is 64 inches. What is its area?

 in<sup>2</sup>

9. Two lines  $m$  and  $n$  intersect. Line  $m$  is given by the equation  $y = 2x$  and line  $n$  is given by the equation  $y = 3 - x$ . Give the ordered pair where  $m$  and  $n$  intersect.

10. For what value of  $x$  will  $\frac{1+x}{3+x}$  be equal to  $\frac{4+x}{8+x}$ ?

## Solutions

1.  $k=-9$
2. 3
3. 4 lawns
4.  $408 \text{ in}^2$
5.  $\frac{1}{25}$
6.  $\frac{1}{32}$
7. \$91.20
8.  $256 \text{ in}^2$
9. (1, 2)
10.  $x = 2$