Bell Work 24

DAY 1

1. Which of the equations below represents this word sentence?

20 more than the number of plush animals, p, is 41.

A.
$$20p = 41$$

B.
$$p = 41 + 20$$

C.
$$p + 20 = 41$$

D.
$$p - 20 = 41$$

2. The Wright family is driving from Dallas, Texas to Portland, Maine, a distance of about 1,875 miles. If they take 15 days to make the trip, which equation could be used to find *m*, the number of miles they will drive per day?

A.
$$15m = 1875$$

B.
$$\frac{15}{m} = 1875$$

C.
$$1875m = 15$$

D.
$$1875 \cdot 15 = m$$

3. A scout troop has 150 boxes of candy bars to sell. Each box contains 12 candy bars. If all the bars are sold and each of the 25 members of the troop sells the same number of candy bars, find *b*, the number of bars each scout will sell?

A.
$$b = 6$$

B.
$$b = 72$$

C.
$$b = 300$$

D.
$$b = 1,800$$

DAY 2

4. Charles has twice the number of cards in his collection as David has in his. Charles has 52 cards in his collection. How many cards does David have?

If *n* represents the number of cards in David's collection, which equation can be used to model the problem situation?

A.
$$n + 2 = 52$$

B.
$$n = 52 \cdot 2$$

C.
$$2n = 52$$

D.
$$n - 2 = 52$$

5. Jose ran 6 laps at track practice on two days last week. He ran 4 laps at practice on the other two days. Which equation can be used to find *I*, the total number of laps he ran?

A.
$$1 = 6 \times 4$$

B.
$$I = 2(6) - 2(4)$$

C.
$$l = (6 + 4) \div 2$$

D.
$$l = 2(6 + 4)$$

6. A plumber charges \$45 for the first hour and *b* for each additional hour. Which expression shows the correct charge for a 7-hour job?

A.
$$45b + 7$$

B.
$$45 + 7b$$

C.
$$45 + 6b$$

D.
$$45b + 6$$

Bell Work 24

BEFORE DAY 3

7. Ms. McCall bought 24 notebooks at a total cost of \$36, excluding tax.

If p represents the price of one notebook, an equation that can be used to model this problem is 24p = 36.

Which is an equivalent equation?

- **A.** $p = 36 \div 24$
- **B.** p = 36 24
- **C.** $p = 36 \times 24$
- **D.** p = 36 + 24
- **8.** This table shows the perimeter of different equilateral triangles.

Side Length	Perimeter		
(n)	(P)		
10	30		
12	36		
15	45		
20	60		

Which formula can be used to find the perimeter of an equilateral triangle with a side length of n?

- **A.** p = n + 3
- **B.** p = 3n
- **C.** $p = n^3$
- **D.** p = 6 + n
- **9.** A video game has 16 levels. You are on level 5. Which equation does <u>not</u> have a solution equal to the number of levels left, *n*?
 - **A.** n + 5 = 16
 - **B.** n = 16 5
 - **C.** 5 + n = 16
 - **D.** n-5=16

10. This table shows some x-values and the corresponding y-values.

Χ	2	4	5	7	10
у	7	13	16	22	31

Which formula shows the relationship between the variables?

- **A.** y = 3x 1
- **B.** x = 3y + 1
- **C.** y = 3x + 1
- **D.** x = 3y 1
- 11. On day 1 of a contest, 6 people were selected to win a free calculator. On each day of the contest that followed, the number of people selected to win a calculator doubled from the previous day. How many people were selected on the seventh day of the contest?
 - **A.** 192
 - **B.** 384
 - **C.** 662
 - **D.** 768
- **12.** The formula to convert temperature in Fahrenheit to temperature in Celsius is $C = \frac{5}{9}(F 32)$. What is the temperature in Celsius if it is 50°F?
 - **A.** 82°C
 - **B.** 45°C
 - **C.** 18°C
 - **D.** 10°C