Homework

Tell the three numbers described in each problem by substituting values in the expressions given to represent the pattern.

Model   If $y = 4$ and the pattern is described by the expressions $y - 1$, y, and $y + 1$, what are the three numbers?

Answer: 3, 4, and 5

1. If $y = 4$ and the pattern is described by the expressions y, $y + 2$, and $y + 4$, what are the three numbers?

2. If $z = 100$ and the pattern is described by the expressions $z - 10$, z, and $z + 10$, what are the three numbers?

3. If $a = -5$ and the pattern is described by the expressions $a - 1$, a, and $a + 1$, what are the three numbers?

4. If $b = 130$ and the pattern is described by the expressions $b - 2$, $b - 1$, and b, what are the three numbers?

Write three different expressions to show the same general pattern for each problem.

Model   34, 35, and 36

Answer:

Method 1: If $x = 34$, the series is x, $x + 1$, and $x + 2$.

Method 2: If $x = 35$, the series is $x - 1$, x, and $x + 1$.

Method 3: If $x = 36$, the series is $x - 2$, $x - 1$, and x.

1. 10, 20, 30   2. 55, 66, 77   3. −1, 0, 1

Activity 3

Tell two different sets of numbers that may be represented by the expressions.

Model $x - 5, x, x + 5$

Answer: Set 1: 5, 10, 15

Set 2: 45, 50, 55

1. $y - 20, y - 10, y$

2. $z - 10, z, z + 10$

3. $w, w + 2, w + 4$

4. $m - 100, m, m + 100$

Activity 4 • Distributed Practice

Solve.

1. $(5 \cdot 2) \div 5 = a$

2. $\frac{2}{4} \div \frac{3}{2} = b$

3. $\frac{1}{3} \div \frac{1}{3} = c$

4. $4^2 + 6 \div 2 = d$

5. $-4 \cdot -3 = e$

6. $\frac{1}{4} \cdot \frac{1}{4} = f$

7. $-6 + -1 \cdot -6 = g$

8. $5 \cdot -5 \cdot -2 = h$