

1. Use digits to write the number two hundred seventeen billion, thirty-five million, four hundred two thousand, eleven.
2. The following number is written in expanded form. Write it in standard form.

$$7 \cdot 10\,000\,000 + 1 \cdot 1\,000\,000 + 6 \cdot 100\,000 + 7 \cdot 10\,000 + 2 \cdot 1\,000 + 8 \cdot 10$$

3. Round 303 478 to the nearest
 - (a) ten
 - (b) ten thousand.
4. Two sides of a rectangle are 45 cm and 15 cm long.
 - (a) Find the perimeter of the rectangle. Include units in your answer.
 - (b) Find the area of the rectangle. Include units in your answer.
5. Consider the following numbers: 7008, 8701, 444, 3540, 3050.
 - (a) Find all numbers from the list that are divisible by 5.
 - (b) Find all numbers from the list that are divisible by 6.
 - (c) Find all numbers from the list that are divisible by 30.
6. List all factors of 190.
7. Find the least common multiple of 160 and 220.
8. Find the average of -8 , 11 , -15 , 21 , -32 , and -1 .
9. Perform the indicated operations. Show all steps.

(a) $-2[3 - 2(-3)] - (3 - 2)(-2) =$

(b) $-3(-2|-7|) + 5(-7 + 2^2) =$

(c) $-|-3|(2 - 5) - (-(-3)) =$

(d) $\frac{(-2)^2 + (-2)^3 - 3(-1)^2}{-3 - (-2)} =$

(e) $-3 - (-2) - 3(-2 + 2^2 + 8 - 6 + 1) + 2|-3| =$

10. Evaluate each of the following expressions if $a = -4$, $b = 3$, and $c = -1$

(a) $|a| + |b| =$

(b) $|a + b| =$

(c) $b^2 - 4ac =$

(d) $5a - 2abc + 3c^2 =$

(e) $\frac{2a^2 + 11a - 21}{2a - 3} =$

(f) $-(a + b)(-a + bc) =$

(g) $\frac{c - 2(3b - a)}{(a - c)^3} =$

11. Solve each of the following equations. Make sure to check your solution.

(a) $-5x = -25$

(b) $p + (-7) = -2$

(c) $\frac{z}{11} = -2$

(d) $w + 6 = -1$