**Content Connections**

# Math 08 - Unit 2 Review ASSIGNMENT
## Operations Involving Integers

*It is assumed that you have completed the lessons and practice questions before attempting this assignment.*

Name: _____

Preferred Contact:_____

## _Math communication_ is being assessed. _Show all work_.

## Assessment:

| Emerging (1) | Developing (2) | Proficient (3) | Extending (4) |
|---|---|---|---|
| The student demonstrates an initial understanding of the concepts and competencies relevant to the expected learning. | The student demonstrates a partial understanding of the concepts and competencies relevant to the expected learning. | The student demonstrates a complete understanding of the concepts and competencies relevant to the expected learning. | The student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning. |
| **Overview of _curricular competency_ topics assessed in the _assignments_:** | | | |
| • Understanding and application of math concepts and strategies. | | | |
| • Connecting and applying math concepts to each other and other ideas. | | | |
| • Modelling and representing problems symbolically, pictorially, graphically. | | | |
| • Communication of math thinking, ideas, language, and appropriate representation of info. | | | |

1. Identify the number category that each of the following numbers belong to by marking an "X" in the appropriate box.

| | Number | Natural Numbers | Whole Numbers | Integers |
|---|---|---|---|---|
| 1 | -543 | | | |
| 2 | 132 | | | |
| 3 | 0 | | | |
| 4 | 2217 | | | |
| 5 | -14,000 | | | |

2. Solve the following.

   a. $6 + (-2) =$ _____

   b. $(-7) + 10 =$ _____

   c. $17 + (-9) =$ _____

   d. $(-4) + (-5) =$ _____

   e. $8 + (-3) + 7 =$ _____

   f. $(-6) + 3 + (-2) =$ _____

   g. $5 - 9 =$ _____

   h. $-9 - (-10) =$ _____

   i. $0 - (-7) =$ _____

   j. $-3 - 3 =$ _____

   k. $8 - (-8) =$ _____

   l. $(-6) + 3 - (-2) =$ _____

3. Solve the following.

   a. $(-4) \times 6 =$ _____

   b. $(-11) \times (-2) =$ _____

   c. $(-3) \times (+5) \times 4 =$ _____

   d. $(-2) \times (-4) \times (-5) =$ _____

   e. $(-27) \div (-9) =$ _____

   f. $(-104) \div 13 =$ _____

4. Find the pair of integers whose

   a. Sum is 5 and product is −14.            _____

   b. Difference is −4 and product is −21.       _____

5. Simplify the following.

   a. $\dfrac{(-10)(12)}{(4)} =$

   b. $\dfrac{(-22)(-9)}{(-11)(-3)} =$

   c. $\dfrac{(-4)(-20)}{(-16)} =$

   d. $\dfrac{(-2)(-8)(-5)(-9)}{(-4)(-3)(-10)} =$

   e. $\dfrac{(-2)(-16)(-30)}{(-6)(-4)(-5)} =$

   f. $\dfrac{(-8)(-9)(-6)(0)}{(-2)(-4)(-3)} =$

6. Farrokh reported that the coldest day on record for his town was five times colder than yesterday's temperature, −3°C. What was the temperature of the coldest day on record in Felix's town?

7. At 6:00 pm the temperature was 12°C. If the temperature drops 3°C per hour, what was the temperature at 11:00 pm?

8. Solve each expression using the correct order of operations.

   a. $6 + 15 \div 3 =$

   b. $5 + 6 \times 6 =$

   c. $9 \div (4 - 1) =$

   d. $(-1) - [(-16) \div 8] - 4(-1) =$

   e. $(-4) + 5 - 9 - [(-1) - (-5)] - 6 =$

   f. $10 \times (-5) + (-6)^2 =$

g. $(-3)^3 - (-8) \times [5 + 6 \div (-3)] =$

h. $[(-4)^3 - (-5)] \times [(-6) \div [5 + (-7)]^2\} =$

i. $\{(-2)^2 \times [3 - (-6) + (-9)]^2\} \div 7 =$