Grade 8 Math Unit 2: INTEGERS **REVIEW** for TEST #2 Name\_\_\_\_\_\_\_\_\_\_\_\_\_

1. When **multiplying only** OR **dividing only** Class:\_\_\_\_\_\_\_\_\_\_\_\_

* **SAME signs** give a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ answer

|  |  |
| --- | --- |
|  |  |
|  |  |

1. When **multiplying only** OR **dividing only**

**DIFFERENT signs** give a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ answer.

|  |  |
| --- | --- |
|  |  |
|  |  |

1. A) An **EVEN number of Negative Integers** **multiplied togethe**r give a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ answer.
2. An **ODD number of Negative Integers** **multiplied together** give a \_\_\_\_\_\_\_\_\_\_\_\_\_\_ answer.

1. **Addition statement written as a multiplication statement:**

(-4)+(-4)+(-4)+(-4)+(-4) =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Properties of Integers**

|  |  |
| --- | --- |
| Example | **Property** |
| (-9) x 0 = 0 |  |
|  |  |
| (-16) x 1 = (-16) |  |
| (-2)[(+3) +(-4)] = (+2)(+3) + (+2)(-4) |  |

1. Evaluate:

|  |  |  |  |
| --- | --- | --- | --- |
| A) (-6)2= \_\_\_\_\_\_\_\_\_ | B) (-5)(-9) = \_\_\_\_\_ | C) (+4)(-8) = \_\_\_\_\_ | D) (+4)(-7) = \_\_\_\_ |
| E) (+9)(+8)= \_\_\_\_\_\_ | F) | G) | H) |
| I) | J) | K) | L) |
| M) | N) = \_\_\_\_\_\_\_ |  |  |

1. The product of two integers is 12. The sum of the same integers is What are the integers?
2. The temperature gets colder by an average of 10oC every two hours. What is the change in temperature which occurs after 12 hours is:
3. Model using either TILES or NUMBER LINE each of the following: Explain your answer.

A) (+4)(-7) C) (-3)(+4)

B) (+3)(+6) D) (-2)(-3)

1. Identify the multiplication of integers shown below.

A) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

B) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

C) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

D) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

1. Identify the division of integers shown by each number line.

A) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

B) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

C) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

D) face

** -8 -7 -6 -5 -4 -3 -2 -1 0 +1 +2 +3 +4 +5 +6 +7 +8**

1. According to BEDMAS, identify the operation which must be performed first. [4 marks]

|  |  |
| --- | --- |
| Integer Expression | Operation to perform first  **DO NOT EVALUATE!!!** |
| A) |  |
| B) |  |
| C) |  |
| D) |  |
| E) |  |

1. Evaluate each expression.

A) +9 + (+3) x (-4) C. 24 ÷ (-4) + (-3) x (-4)

B) D. (-10)2 ÷ [ (+8) - (-2) ]

1. Blaine drove from Deer Lake to St. John’s at an average speed of 100 km/h. After 4.5 hours of driving Blaine was still 200 km away from St. John’s. Determine how far apart Deer Lake and St. John’s are from one another.
2. A stock market decreased in price by $77 over seven days. What is the daily decrease in price?
3. What is the multiplication statement shown?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the division statement shown?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What would happen if these blocks were ALL clear?­­­­­­­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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MULTIPLICATION STATEMENT\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DIVISION STATEMENT\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. A) How would you model (-2) x (+5)?

B) How would you model (-8) +2)?

Unit 2 : INTEGERS MIDTERM REVIEW ANSWER SHEET

1. Positive A) +56 B) +9 C) +30 D) +4
2. Negative A) -24 B) -7 C) -35 D) -5
3. A) +ve B) –ve
4. (+5)(-4)
5. A) Zero Property B) Commutative Property C) Multiplicative Identity D) Distributive Property
6. A) +36 B) +45 C) -32 D) -28 E) +72 F) +6 G0 +11 H) 0 I) -6 J) -3 K) -60 L) -144 M) +4

N) indefined

1. (-4) and )-3)
2. -60
3. A) -28 B) \_18 C) -12 D) +6
4. A) (-2)(-4)=(+8) B) (+2)(+4)=(+8) C) (-2)(+3)=(-6) D) (+2)(-3)=(-6)
5. A) B) C)
6. A) division B) subtraction C) brackets (subtraction) D) exponents E) division of left
7. A) -3 B) +2 C) +6 D) +10
8. 650 km
9. -11 drop of $11 /day
10. A) (+4)(+5) B) C)
11. E)
12. A) Models remove two groups of size +5 B) model (dividend +8) dived by (forward 2) = backward facing 4