

NAME: _____ Period: _____

Intermediate 1 END OF YEAR Review #1

1. Kari ordered the following integers from least to greatest. Explain if this order is correct. If it is incorrect please correct it. If it is correct explain how you know.

0, 2, 5, -8, 9, -11, -16, 20

Correct yes or no? Explain:

2. Separate the following fractions into terminating or repeating.

$\frac{5}{6}$, 0.44, $\frac{1}{5}$, $\frac{4}{9}$, $\frac{3}{7}$, 0.75, $\frac{1}{2}$, $\frac{6}{11}$, $0.\overline{2}$

Terminating	Repeating

3. Would the following product be positive or negative? Explain how you know.

$$-46 \cdot -367 \cdot -4,532$$

For problems 4 and 5 complete the statement using $<$, $=$, $>$.

4. $-3 \cdot 5$ _____ $|-8-7|$

5. $|-6+11|$ _____ $-|6+-11|$

6. Find the value of each expression and order the expressions from least to greatest using the letters.

A) $|-10+7|$ B) $-10+7$ C) $|-10-7|$ D) $-10-7$

For problems 7 – 12 use the order of operations to evaluate each expression. Show all your work.

7. $32 - 9 \cdot 4 \div 2 + 8$

8. $8 - 6(3 + 2 \cdot 6)$

9. $5 + 6(2 - 7)^2$

10. $4^2 + 20 - 6$

11. $(x + y)^3$ $x = 5$ and $y = -14$

12. $x^2 - y^3$ $x = -2$ and $y = -3$

For problems 13 – 15, find the greatest common factor (GCF) AND factor each expression completely.

13. $15x - 45$

14. $8y - 12yk$

15. $11w - 15$

For problems 16 – 18, use distributive property to simplify each expression.

16. $4(7m - 3)$

17. $\frac{1}{4}(12m + 8)$

18. $-6(3h - 12)$

For problems 19 – 24, use inverse operations to solve each equation.

19. $48 = 4(-4x + 4)$

20. $3(2w + 5) = -33$

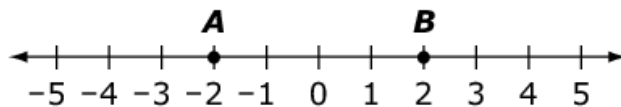
21. $-46 = -1(6y - 8)$

22. $\frac{3}{5}x - \frac{3}{4} = \frac{3}{10}$

23. $\frac{m-3}{9} = -5$

24. $\frac{4}{5}k - 7 = 9$

25. Two points, A and B, are labeled on the number line. What is the value of A + B?



26. A bowling alley charges x dollars per guest and a fixed \$50 rental fee for parties. Which equation represents the total cost, y , for 9 guests?

(A) $y = 9x$

(B) $y = 9x + 41$

(C) $y = 9x + 50$

(D) $y = 50x + 9$

27. Anne goes to Nickel Cade, and each arcade takes a different amount of tokens. Wreck-It-Ralph takes three tokens, Pac-Man takes 1 token and Pinball takes 2 tokens. She plays three games of Pac-Man, seven games of Pinball and two games of Wreck-It-Ralph. Write and evaluate an expression for the total number of tokens Anne used.

28. In 1989, the temperature of Neptune’s largest moon was -392° F. Eight years later the data from the telescope showed the moon’s temperature at -389° F. Is this second temperature greater or less than the original temperature?

29. The table shows the daily temperature at Alaska’s Barrow Observatory over a seven day period.

a. Did the temperature increase or decrease from Sunday to Monday?

b. Did the temperature increase or decrease from Friday to Saturday?

c. Which day had the highest temperature?

d. Which day had the lowest temperature?

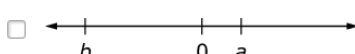
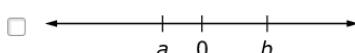
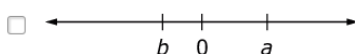
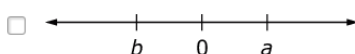
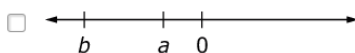
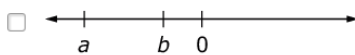
Day	Temperature
Sunday	-19° C
Monday	-17° C
Tuesday	-14° C
Wednesday	-9° C
Thursday	-13° C
Friday	-18° C
Saturday	-21° C

30. Rafi has \$48.00 to spend on games. Each game costs \$3.00. He writes the expression shown to represent the amount of money his has after purchasing, g , games.

a. Write an expression that represents this situation.

b. How many games can Rafi play until he runs out of money?

31. Gary is thinking of three numbers, a , b , and c , where $b - a = c$ and $c < 0$. Select ALL of the number lines that could represent Gary’s numbers.



32. Austin ran $\frac{5}{6}$ of a mile, Alfonso ran 0.89 miles, Cayden ran $\frac{7}{8}$ of a mile and Tyler ran 0.86 miles. List the runners in order of the longest distance run to the shortest.

33. Select all the expressions that are equivalent to -7 .

$-\frac{14}{2} \times \frac{7}{7}$

$7 \times -1 \times -1 \times -1$

$-4 \times \frac{7}{4}$

-7×-1

7^{-1}

34. Select one phrase that describes the sum or difference of each expression.

	Greater than zero	Less than zero	Equal to zero
$7 - (-7)$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$7 + (-7)$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$(-7) + (-7)$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
$(-7) - 7$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>