NAME:_____ Period:_____

Intermediate 1 END OF YEAR Review #1

1. Order the following integers from least to greatest.

   -7, 3, -1, 0

2. What is the opposite of -2?

3-10 Simplify each expression.

3. $|20|$ = _____

4. $|-8|$ _____

5. $-|-5|$ _____

6. -8 + 5 _____

7. -8 + -5 _____

8. -8-(-5) _____

9. -8 – 5 _____

10. -45 ÷ -9 _____

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

-46 • -367 • -4,532

12-13: Complete the statement using <, =, >.

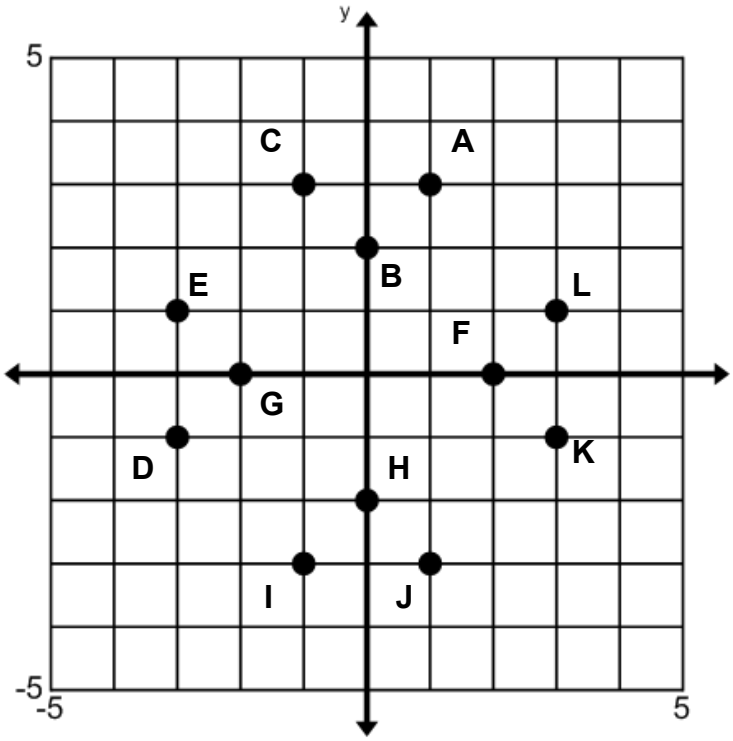
12. $-3 \cdot 5$ _____ $|-8-7|$

13. $|6+-11|$ _____ $-|6+-11|$

14. Order the expressions from least to greatest using the letters.

A) $|-10+7|$ **B)** -10 + 7 **C)** $|-10-7|$ **D)** -10 – 7 _____

15-18 Write the label of the point that has the following coordinates.



15. (1,-3) = _____

16. (0,2) = _____

17. (-3,-1) = _____

18. (-2,0) = _____

19-22 Write the ordered pair (coordinates) for each of the given points.

19. H = _____

20. C = _____

21. F = _____

22. I = _____

23. What quadrant is point D in? (I, II, III, or IV)

24. What axis is point F on?

Find each percent of change. Also tell whether each is a percent increase or a percent decrease.

25. original: 8 cm wide
new: 12 cm wide

26. original: $75
new: $60

27. original: 250
new: 100

Use the order of operations to evaluate each expression. Show all your work.

28) $32 - 9 \bullet 4 \div 2 + 8$

29) $8 - 6(3 + 2 \bullet 6)$

30) $5 + 6(2 - 7)^2$

31) $4^2 + 20 - 6$

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

33) $x^2 - y^3$ x = -2 and y = -3

Simplify the following fraction expressions. Don't forget to write each fraction in lowest terms. Show work. No Calculator.

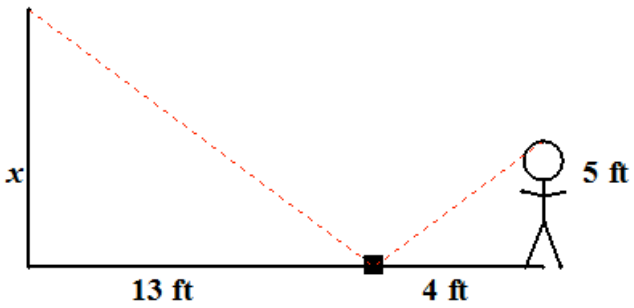
34) $\frac{3}{4} + 2\frac{1}{2}$

35) $5\frac{2}{5} - 3\frac{3}{10}$

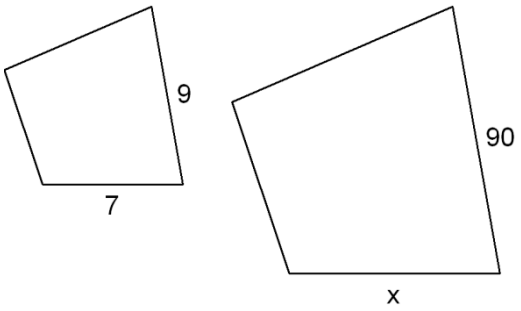
36) $3\frac{2}{5} \bullet 1\frac{3}{10}$

37) $8\frac{2}{5} \div 4\frac{1}{5}$

38) Mary is standing next to the flag pole outside the school. She uses a mirror to help her calculate the height of the flag pole. Mary is 5 feet tall and she is standing 4 feet from the mirror. The mirror was placed 13 feet from the base of the flagpole. What is the height of the flagpole?



39) Circle the proportion that is set up **INCORRECTLY.**



A. $\frac{x}{90} = \frac{7}{9}$

B. $\frac{x}{9} = \frac{7}{90}$

C. $\frac{9}{7} = \frac{90}{x}$

D. $\frac{7}{x} = \frac{9}{90}$

Solve the following equations for the missing variable.

40. $x+4=6$

41. $32.02=6.2x-5.8$

42. $28x=4$

43. $3(2x+5)=-33$

44. $\frac{5}{7}x=15$

45. $6.4+5.5x=30.6$

46. $48=4(-4x+4)$

47. $x-7=2$

48. $\frac{x}{4}=9$

49. $-46=-1(6x-8)$

50. $3.4x=20.74$

51. $-8.1=-x$

Solve the following equations for the missing variable.

52. $-\frac{1}{2}x=-16$

53. $6(3x-4)=-18$

54. $4x+4=16$

55. $8=-6+x$

56. $-10x-1=-6$

57. $4+6x=-2$

58. $-1(4x-2)=1$

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

60. $\frac{x}{-4}=-2$

Solve the following equations for the missing variable.

61. $-1=-3x-7$

62. $x-\frac{1}{3}=\frac{4}{3}$

63. $x-1=-3$

Simplify.

64. $5p-7+4p$

65. $2(10x-3)-4x$

66. $10m+6+10$

67. $-4(x+5)$

68. $x-5+2x-4$

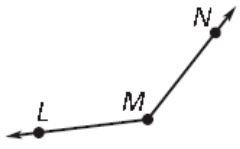
69. $-2(-7n+11)$

70. $-9k-4-7k$

71. $(a-5)(10)$

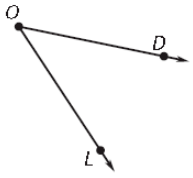
State whether the angle appears to be *acute, right, obtuse,* or *straight.*

72.



73.

74.



Solve the following percent problems. Remember to label percents if necessary.

75. Find 30% of 10.

77. 7.5 is 80% of what?

79. What percent of 10 is 3?

76. 3 is what percent of 3?

78. 2 is 125% of what number?

80. What is 10% of 4?