

Name _____ Summer Assignment – 7th grade going to 8th grade – Mrs. Finan

In preparation for 8th grade, please complete the assigned problems. Please do each section on a new sheet of loose leaf. For each problem, please make sure it is properly numbered, the original problem is re-written (with the exception of word problems), all work is shown, and the answer is clearly indicated. No credit will be given if no work is provided. This will be your cover sheet: please attach all work, in order, to this page. This will count as the first grade for the school year. All problems are to be done without the use of a calculator.

Section I

Find the value of each expression (evaluate) for the given values of the variable.

1)

a	$a - 17$
20	
22	
25	

2)

m	$9m$
7	
9	
11	

3)

d	$4d + 7$
0	
2	
4	

Evaluate each expression for $n = 3$. Follow PEMDAS.

4) $2n + 5 - n$

5) $\frac{3n+18}{3n}$

6) $\frac{24}{4-n} \cdot n$

Evaluate each expression for $m = 5$, $n = 4$, $r = 8$. Show ALL work, follow PEMDAS.

7) $m + n$

8) $mn + 3r$

9) $5m - 2n$

Section II

Order the integers in each set from least to greatest.

10) $-9, 5, 2, -8, 0, 10, -12$

12) $-9, -2, -12, -6, -15, -1$

11) $-13, -16, 11, -6, 7, 2, -4$

13) $-33, 33, -19, 19, 27, -27$

14) Golf can have positive and negative scores. In golf, the lowest score wins. Adam gets a score of -5 , Billy gets a score of 3 , and Carrie gets a score of -3 . Who won the game?

15) The lowest temperature recorded in Colorado is -50°F . The lowest temperature recorded in Kansas is -40°F . Which state had the lower temperature?

16) The lowest temperature ever recorded in Illinois -38°F . Was it ever that cold in Kansas?

Section III

Simplify each expression (Solve, NO CALCULATORS). Remember your integer rules (same signs add and keep, different signs subtract).

17) $3 + (-12)$

21) $215 + (-117)$

25) $6 - 18$

18) $-25 + (-7)$

22) $-508 + 507$

26) $21 - (-15)$

19) $-17 + 18$

23) $-5 - 8$

27) $-38 - 38$

20) $-23 + 35$

24) $-3 - (-7)$

28) $-23 - (-23)$

29) The temperature was 2°F . By midnight, the temperature had dropped 7°F . What was the temperature at midnight?

Section IV

Simplify each expression (Solve, NO CALCULATORS. Remember your integer rules (dorito man)).

30) $3 \cdot (-15) \cdot 2$

35) $2(-4)(-8)(-6)$

39) $\frac{35}{-7}$

31) $-8 \times (-5) \times 4$

36) $\frac{-45}{9}$

40) $-72 \div 9$

32) $-7(-2)(-1)$

37) $\frac{50}{5}$

41) $-\frac{48}{-6}$

33) $-1 \cdot 3 \cdot 2 \cdot (-6)$

38) $-64 \div 8$

34) $-3(-1)(-4)(-7)$

42) An elevator descends 1,000 feet in 8 seconds. What is the change in height per second?

Evaluate each expression for $c = -2$ and $d = 5$. Follow integer rules and PEMDAS.

43) $cd - 5d$

47) $\frac{d-c+8}{5}$

44) $dc + (c - d)$

48) $\frac{12d}{c-4}$

45) $d + 3c \div 2$

46) $(2d - c) \div [4(d + c)]$

Section V

Find each product. Use distributive property!!! Ex. $2(y+6) \rightarrow 2y+12$

49) $5(a + 6)$

51) $-4(x + 3)$

53) $(8 + r)4$

50) $7(b - 9)$

52) $(v - 2)9$

54) $(-11 + w)(-2)$

55) At the school store, notebooks cost \$3.49. How much will you pay for 4 notebooks?

56) Four students sell 38 tickets each to a school play. The school auditorium can seat 150 people. Are there enough seats? Show your work for proof.

Section VI

Solve each equation. Show all work.

57) $p - 1 = -12$

60) $23 = q - 12$

63) $r + 27 = -52$

58) $y - 2 = -37$

61) $w - 32 = -5$

64) $3 + c = -10$

59) $x - 14 = -36$

62) $x + 1 = 22$

65) $f + 47 = 100$

Section VII

Solve each equation. Show all work.

66) $\frac{d}{10} = 34$

70) $\frac{h}{-9} = 3$

74) $20b = -460$

67) $\frac{x}{5} = -1$

71) $\frac{k}{-7} = 5$

75) $-16 = -8d$

68) $\frac{w}{9} = -17$

72) $4x = 432$

76) $17n = -85$

69) $\frac{a}{-11} = -52$

73) $-24k = 144$

Section VIII

Simplify each expression. (Solve it, Show all work)

77) $\frac{2}{3} + \frac{4}{5}$

80) $12 \div \frac{1}{3}$

84) $5 - \frac{5}{8}$

78) $(6) \left(1 \frac{3}{10}\right)$

81) $\left(\frac{6}{7}\right) \left(\frac{3}{8}\right)$

85) $3 \frac{5}{6} - 1 \frac{1}{4}$

79) $\frac{1}{2} - \frac{3}{10}$

82) $2 \frac{3}{4} + 2 \frac{5}{9}$

83) $\frac{9}{10} \div \frac{6}{15}$

