

# \_\_\_\_\_

Period: \_\_\_\_\_ Date: \_\_\_\_\_

## Rising "Transitions to Algebra" Students

To get ready for Transitions, you will need to complete an online set of assignments at [Aleks.com](https://www.aleks.com) and the attached packet- have everything completed online and the packet ready to turn in on the first full day of class (August 08).

Online directions:

1. Log onto [Aleks.com](https://www.aleks.com)
2. Complete the Current course you are in- "Middle School Math Course I". If you are unable to complete the course, you must complete at least 30 topics.
3. If you complete Math Course I, you will be put in an "Middle School Math Course II"
4. Take the Diagnostic for "Middle School Math Course II" and do as much as you can before school starts

Packet Directions:

Please show all your work in the space provided or add additional notebook or graph paper as needed. You must show all work to receive credit for this assignment. No calculators are permitted on the summer packet. I recommend working on the packet each week instead of sitting down and completing it all at once. Please post your answers on the answer sheet provided. This will be collected on the first full day of school and will be graded for accuracy.

**If you need assistance, I will be available to help you with these concepts on June.27 from 9:30-10:30 and July 17 from 11:30-12:30 in room 216.**

1. \_\_\_\_\_ ; \_\_\_\_\_

2. \_\_\_\_\_ ; \_\_\_\_\_

3. \_\_\_\_\_ ; \_\_\_\_\_

4. \_\_\_\_\_ ; \_\_\_\_\_

5. \_\_\_\_\_ ; \_\_\_\_\_

6. \_\_\_\_\_ ; \_\_\_\_\_

7. \_\_\_\_\_ ; \_\_\_\_\_

8. \_\_\_\_\_ ; \_\_\_\_\_

9. \_\_\_\_\_ ; \_\_\_\_\_

10. \_\_\_\_\_ ; \_\_\_\_\_

11. \_\_\_\_\_

12. \_\_\_\_\_

13. \_\_\_\_\_

14. \_\_\_\_\_

15. \_\_\_\_\_

16. \_\_\_\_\_

17. \_\_\_\_\_

18. \_\_\_\_\_

19. \_\_\_\_\_

20. \_\_\_\_\_

- |           |           |           |           |            |
|-----------|-----------|-----------|-----------|------------|
| 21. _____ | 22. _____ | 23. _____ | 24. _____ | 25. _____  |
| 26. _____ | 27. _____ | 28. _____ | 29. _____ | 30. _____  |
| 31. _____ | 32. _____ | 33. _____ | 34. _____ | 35. _____  |
| 36. _____ | 37. _____ | 38. _____ | 39. _____ | 40. _____  |
| 41. _____ | 42. _____ | 43. _____ | 44. _____ | 45. _____  |
| 46. _____ | 47. _____ | 48. _____ | 49. _____ | 50. _____  |
| 51. _____ | 52. _____ | 53. _____ | 54. _____ | 55. _____  |
| 56. _____ | 57. _____ | 58. _____ | 59. _____ | 60. _____  |
| 61. _____ | 62. _____ | 63. _____ | 64. _____ | 65. _____  |
| 66. _____ | 67. _____ | 68. _____ | 69. _____ | 70. _____  |
| 71. _____ | 72. _____ | 73. _____ | 74. _____ | 75. _____  |
| 76. _____ | 77. _____ | 78. _____ | 79. _____ | 80. _____  |
| 81. _____ | 82. _____ | 83. _____ | 84. _____ | 85. _____  |
| 86. _____ | 87. _____ | 88. _____ | 89. _____ | 90. _____  |
| 91. _____ | 92. _____ | 93. _____ | 94. _____ | 95. _____  |
| 96. _____ | 97. _____ | 98. _____ | 99. _____ | 100. _____ |

## **Place Value, Translating Words to Math & Rounding**

**Name the place value and identify the value of the underlined digit.**

Examples:

- I. 34,521: Answer: thousands; 4,000      II. 97.0632: Answer: hundredths; 0.06

1. 2,732                      2. 51.19                      3. 4,231.0942                      4. 0.58682                      5. 745.091
6. 1,214.782                      7. 2,313.17                      8. 35,486,512.99                      9. 1.2623                      10. 92,322.8

**Translate each set of words to number form or to a math expression.**

Examples:

- I. Twelve thousand, five hundred two and three tenths: Answer: 12,502.3  
II. The sum of forty and two: Answer:  $40 + 2$

11. Sixteen and eight hundredths                      12. Four thousand, fifty eight  
13. Two hundred four and two tenths                      14. Twenty five and thirty two hundredths  
15. Sixty-eight million                      16. Three and two ten-thousandths  
17. The product of eight and twelve                      18. The quotient of nine and three  
19. The difference between ten and two                      20. Two less than eighty

**Round each value to the designated place value.**

Examples:

- I. 28 to the nearest ten: Answer: 30      II. 623.429 to the nearest tenth: Answer: 623.4

21. 593.28 to the nearest thousand                      22. 62,531.84 to the nearest hundred  
23. 75,999 to the nearest thousand                      24. \$682.489 to the nearest cent  
25. 0.8305 to the nearest hundredth                      26. \$849.50 to the nearest dollar  
27. 12,762.98 to the nearest whole number                      28. 684.99 to the nearest ten  
29. 481,327, 641 to the nearest million                      30. 149,999 to the nearest thousand

## Integers & Order of Operations

**Evaluate each expression.**

Examples:

I.  $(4)(-3)$  Answer:  $-12$

II.  $4 - 9$  Answer:  $-5$

III.  $4 + 8 \cdot 2$  Answer:  $20$

\*Positive x Negative = Negative

\*  $4 - 9 = 4 + (-9)$   
Different signs so  
subtract and keep the  
sign of the number with  
a larger absolute value

\*Follow order of operations  
(PEMDAS) Multiply 8 and 2  
and then add 4

31.  $-91 + 76$

32.  $-48 + (-12)$

33.  $-29 - 12$

34.  $-12 - (-32)$

35.  $-11 \cdot 4$

36.  $-24 \div 6$

37.  $\frac{11+1}{6-2}$

38.  $(-3)(-18)$

39.  $36 - 4 \cdot 3$

40.  $18 - (2)(7)$

## Decimals

**Add or subtract as indicated.** \*Remember to line up decimal points before adding or subtracting. Fill in zeros to hold place values as needed.

41.  $512.96 + 231.45$

42.  $587.24 + 421.9$

43.  $62.75 + 310.002$

44.  $921.97 - 500$

45.  $78.24 - 312.8$

46.  $\$8.00 - \$6.78$

47.  $\$10.00 - \$0.99$

48.  $9.1 + 15 + 23.4 + 122 + 68.23$

49.  $98.27 - 32.5 - 16.4$

50.  $-481.27 - 21.73$

**Multiply.** \*Reminder: To multiply decimals, multiply as usual. Then count the values to the right of the decimal point in both factors. Add them together to find their sum. Leave the same number of values to the right of the decimal point in the answer as the sum found in the prior step.

51.  $(3.2)(5.3)$

52.  $(6.07)(2.6)$

53.  $(23.71)(19.46)$

54.  $(23)(321.07)$

55.  $(9,000)(0.2)$

56.  $(765.2)(2.31)$

**Divide.** \*Reminder: The divisor may not have a decimal in it. Move the decimal point to the end of the divisor to make it a whole number. Move the decimal point in the dividend the same number of places it was moved in the divisor. Bring the decimal point up to the quotient line. Divide until you get a terminating or repeating decimal.

57.  $27.3 \div 3.5$

58.  $40.5 \div 1.25$

59.  $226.793 \div 18.1$

60.  $24.003 \div 63$

61.  $330.54 \div 4.2$

62.  $9816 \div 0.3$

## Fractions & Mixed Numbers

**Evaluate each expression. Express answers in lowest terms. \*NO DECIMAL ANSWERS.**

\*Reminders: To add or subtract fractions, they must have a common denominator.

To multiply fractions, multiply the numerators, multiply the denominators, simplify if possibly. You can also cross cancel if diagonals have a GCF > 1.

Dividing fractions is the same as multiplying by the reciprocal, so leave the first fraction alone, change the division sign to times and flip the 2<sup>nd</sup> fraction. Then follow multiplication rules.

63.  $\frac{3}{8} + \frac{1}{4}$

64.  $\frac{2}{3} - \frac{2}{5}$

65.  $4\frac{1}{3} + 2\frac{2}{5}$

66.  $8\frac{1}{4} - 3\frac{2}{3}$

67.  $\frac{2}{3} + \frac{5}{6}$

68.  $9\frac{1}{8} - 2\frac{5}{6}$

69.  $\frac{3}{5} \cdot \frac{2}{3}$

70.  $3\frac{3}{5} \cdot \frac{1}{6}$

71.  $8 \cdot \frac{1}{6}$

72.  $\frac{2}{3} \div \frac{5}{6}$

73.  $4\frac{9}{10} \div 2$

74.  $\frac{3}{5} \div \frac{1}{6}$

75.  $\frac{9}{10} \div \frac{3}{4}$

76.  $\frac{1}{2} \div \frac{3}{8}$

77.  $\frac{1}{3}(9)$

78.  $\frac{1}{4}(12)$

79.  $\frac{2}{3}(15)$

80.  $\frac{1}{2}(48)$

## Conversions

Convert each value to the unit of measured indicated. Use the chart provided or Mr. Milton's if you don't yet have them memorized. These will need to be memorized by the first test.

81. 40 fl oz = \_\_\_\_\_ pt.

82. 5.5 tons = \_\_\_\_\_ lbs.

83.  $9\frac{1}{3}$  yd = \_\_\_\_\_ ft.

84. 2.25 miles = \_\_\_\_\_ ft.

85. 72 in = \_\_\_\_\_ yd.

86. 12 qt = \_\_\_\_\_ pts.

87. 9 feet = \_\_\_\_\_ in.

88. 10 cups = \_\_\_\_\_ qt.

89. 4 hours = \_\_\_\_\_ seconds

90. 24 pt = \_\_\_\_\_ gal.

### **Length**

12 in = 1 foot  
3 ft = 1 yard  
36 in = 1 yard  
5,280 ft = 1 mile  
1760 yd = 1 mile

### **Time**

60 sec = 1 minute  
60 min = 1 hour  
3,600 sec = 1 hour  
24 hours = 1 day

### **Weight**

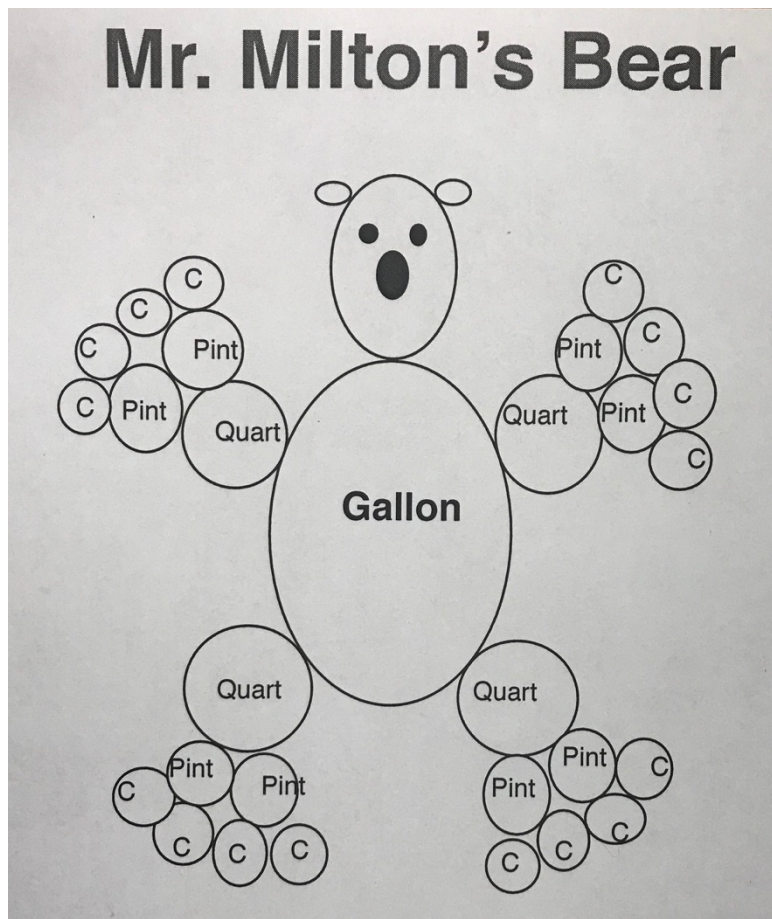
16 oz = 1 pound  
2,000 lbs = 1 ton

### **Liquid**

8 fluid oz = 1 cup  
2 cups = 1 pint  
2 pints = 1 quart  
4 quarts = 1 gal



# Mr. Milton's Bear



For conversions within the Metric System, use: **King Henry Died By Drinking Chocolate Milk**

<b><u>K</u></b>	<b><u>H</u></b>	<b><u>D</u></b>	<b><u>BASE</u></b>	<b><u>D</u></b>	<b><u>C</u></b>	<b><u>M</u></b>
Kilo	Hecto	Deka	Meter	Deci	Centi	Milli
			Liter			
			Gram			

Move the decimal the same number of places and direction from the original unit to the desired unit.

91. 5 km = \_\_\_\_\_m

92. 6L = \_\_\_\_\_mL

93. 3,700 mL = \_\_\_\_\_L

94. 20mm = \_\_\_\_\_cm

95. 52.9 kg = \_\_\_\_\_g

96. 9.7 cm = \_\_\_\_\_m

97. 160 mg = \_\_\_\_\_g

98. 14.765 m = \_\_\_\_\_cm

99. 45.65 km = \_\_\_\_\_m

100. 1,250mL = \_\_\_\_\_L