

7th to 8th Grade Math Matters Summer Packet

Due Date: September 6th or 7th to Mrs. Fagan or Moderator

Dear Math Matters students and parents,

This summer, we encourage you to continue to practice your mathematics at home. Being actively involved in mathematical activities enhances learning.

In preparation for the 2017-2018 school year, students are provided with a summer review packet. This packet focuses on some of the prerequisite concepts and skills necessary for student success in 8th grade Math Matters. The packet may be graded at the teacher's discretion, and may receive extra credit.

While completing the review packet, we recommend that students:

- Complete each problem showing all steps used to arrive at the final answer.
- Show all work neatly in the actual packet, if it is printed. (Additional lined paper may be added if necessary.)
- If packet is not printed, then make sure to number each page and problem as it appears on the packet. All work must be neatly presented.
- Box your final answers.
- Label answers when necessary.
- Do NOT use a calculator.
- Do not rush! Use time wisely.
- If you are stuck on a particular problem, check out one of the math websites posted below. Parents may also be able to help. If you are still having difficulty, circle the problem number and be prepared to ask questions in class in September.

Helpful APPS:

<http://www.khanacademy.org>

<http://www.aplusmath.com>

<http://funbrain.com>

<http://aaamath.com>

<http://math.com>

Have a fun and productive summer.

Regards,

Mrs. Fagan
Math Matters Teacher

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Write the place and the value for each underlined digit.

	Place	Value
1) 12, <u>9</u> 86,543.24		
2) 1,00 <u>8</u> ,091,452.3		
3) 98,765. <u>8</u> <u>5</u> 2		
4) 45.0000 <u>9</u>		
5) <u>7</u> 89,123,456.654		

Write the number in standard form.

6) $(4 \times 10^8) + (3 \times 10^7) + (8 \times 10^6) + (9 \times 10^5) + (7 \times 10^4) + (2 \times 10^0) + (1 \times 10^{-2})$

7) $(3 \times 10^6) + (2 \times 10^{-3})$

Write the number in expanded form (exponential form).

8) 8,391,901.452

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Round to the greatest nonzero place.

9) 0.76198 _____ 10) 6.8101 _____

11) 7.0897 _____ 12) 3.002 _____

Use rounding to estimate the decimal sum.

13) $4.362 + 17.649 + 8.539$ _____ 14) $98.37 + 6.08 + 0.122$ _____

Use compatible numbers to estimate decimal quotients.

15) $6.936 \div 3.7$ _____ 16) $4.2438 \div 64$ _____ 17) $19.4 \div 3.86$ _____

Identify if each number is divisible by 2, 3, 4, 5, 6, 8, 9, and/or 10.

18) 354,098 _____

19) 986,567 _____

20) 986,123,011 _____

21) 875 _____

Find the factors of the following. Use a factor tree. Show your work.

22) 1150

23) 246

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Find the greatest common factor of these numbers. Show your work.

24) 9, 18, 72

25) 19, 76, 133

Find the least common multiple of these numbers.

26) 5, 8, 20

27) 5, 7, 35

Use <, =, or > to compare the decimals.

28) 3.564 ____ 3.556

29) 0.00714 ____ 0.00741

30) 5.004 ____ 5.014

31) 8.111 ____ 8.101

Order the numbers from least to greatest.

32) 4.098; 4.106; 3.996 _____

33) 12.12; 12.26; 12.16 _____

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Order the numbers from greatest to least.

34) 4.75; 4.79; 4.97 _____

35) 71.107; 70.707; 71.707 _____

Multiply. Show your work.

36) 4.7×1.18

37) 0.98×65.41

38) 8.6×6.8

39) 9.5×6.2

40) 49.3×1.5

41) 986.32×7.8

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Divide. Show all work.

42) $7.26 \div 1.2$

43) $0.081 \div 0.09$

44) $99.15 \div 0.3$

45) $6.84 \div 3.8$

46) $42.84 \div 8.4$

47) $0.91 \div 0.7$

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Add, subtract, multiply or divide. Answer should be always in simplest form.

48) $\frac{7}{9} + \frac{1}{2}$

49) $2\frac{5}{7} + 9\frac{1}{4}$

50) $8\frac{2}{5} + \frac{2}{3}$

51) $\frac{3}{4} - \frac{5}{7}$

52) $3\frac{1}{5} - 2\frac{9}{10}$

53) $18\frac{5}{21} - 8\frac{1}{3}$

54) $\frac{1}{4} \times \frac{4}{5}$

55) $2\frac{1}{3} \times \frac{4}{7}$

56) $5\frac{2}{6} \times 3\frac{6}{8}$

57) $8\frac{1}{3} \div 7\frac{1}{7}$

58) $4\frac{1}{2} \div 8$

59) $6\frac{2}{9} \div 2\frac{3}{7}$

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Complete the chart.

Decimal	Fraction	Percent
60)	$\frac{5}{8}$	61)
2.125	62)	63)
64)	65)	19 $\frac{1}{2}$
3.75	66)	67)
68)	$\frac{1}{3}$	69)

Solve the equations showing your work.

70) $e + 3.2 = 7.5$

71) $15x = 225$

72) $\frac{y}{5} = 9$

73) $77 - n = 104$

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Complete the operations for the following.

74) $-2 - (-4) =$ _____

75) $-18 - 5 =$ _____

76) $-23 \times 9 =$ _____

77) $-35 \div 7 =$ _____

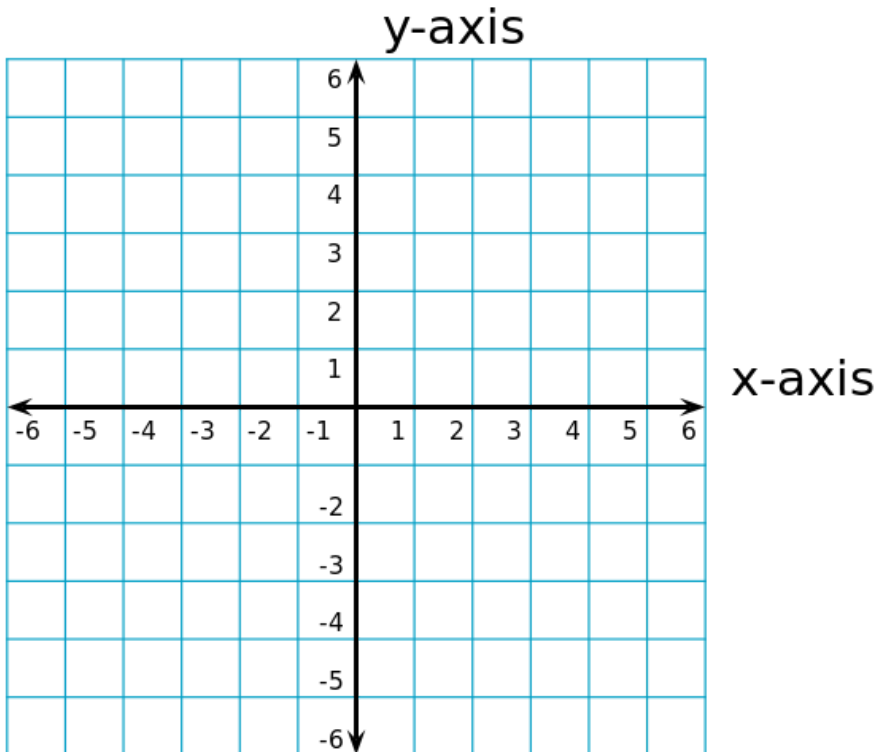
Plot the points on the graph. Label the points with the letter.

78) R(1,2)

79) S(3, -4)

80) T(-4, -2)

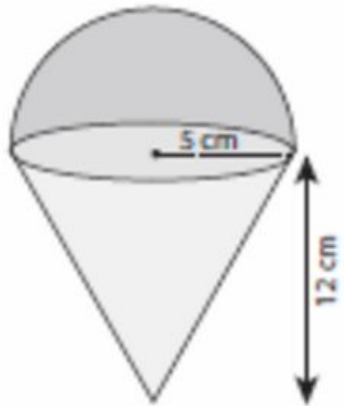
81) U(-5, -5)



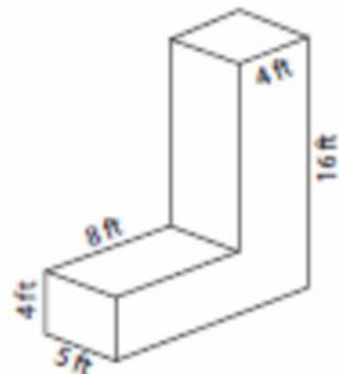
Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

82) Find the area of the combined figure. Show all work. Use 3.14 for pi.



83) Find the volume of the combined figure.



Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

Give the slope for the line that goes through the two points. Show your work.

84) $(1, 2); (4, 8)$ _____

85) $(-3, -2); (5, 6)$ _____

What is the slope and the y-intercept of the following equations. Then calculate The x-intercept.

86) $y = \frac{1}{2}x - 2$

Slope _____

Y-intercept _____

X-intercept _____

87) $y = -6x + 1$

Slope _____

Y-intercept _____

X-intercept _____

Name _____ School _____

7th To 8th Grade Math Matters Summer Packet

What can you tell me about the lines?

88) $y = -\frac{1}{2}x + 4$
 $y = -\frac{1}{2}x - 8$

89) $y = 2x + 7$
 $y = -\frac{1}{2}x + 6$

Graph the following on graph paper using the slope and intercept.

90) $y = -\frac{1}{3}x + 1$

91) $y = 5x - 2$