Neshaminy School District

Curriculum, Assessment & Instruction Department

Mathematics

Summer Preparation Packet 7th Grade Math (Course 2)

Dear Parent/Guardians,

This packet is meant to provide your child with a review of the material your child learned in their current math course. Your child is expected to return this completed packet to his/her math teacher on the first day of school. Please have your child pace themselves; it is to no ones benefit to wait until the last day of summer to start the packet. As your child completes the packet, have them do the following:

- Show all work, on a separate sheet if needed.
- Do not use a calculator.

Name: _____

Date: _____

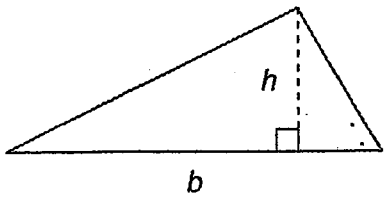
Algebra 1 Part 1 R
Review Packet
Revised: July 2012 MT

Grade 6 Formula Sheet

Formulas that you may need to work questions on this test are found below.
You may refer back to this page at any time during the mathematics test.

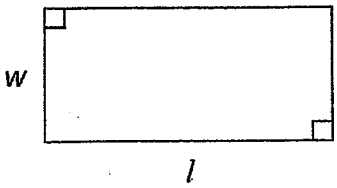
2016
Grade 6

Triangle



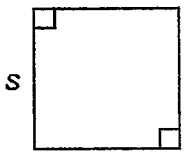
$A = \frac{1}{2}bh$

Rectangle



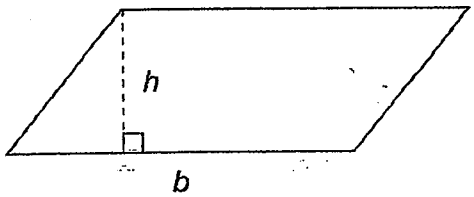
$A = lw$

Square



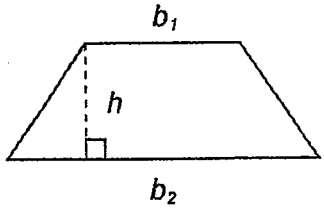
$A = s^2$

Parallelogram



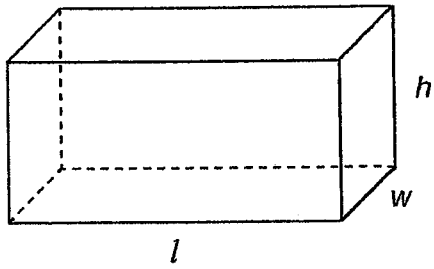
$A = bh$

Trapezoid



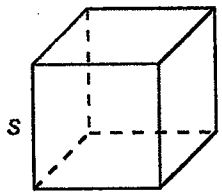
$A = \frac{1}{2}h(b_1 + b_2)$

Rectangular Prism



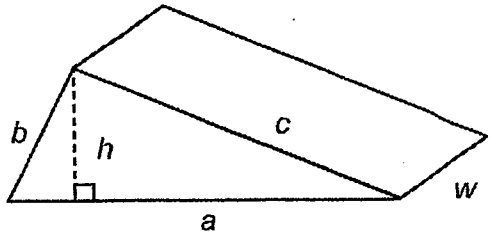
$V = lwh$ $SA = 2lw + 2lh + 2wh$

Cube



$V = s \cdot s \cdot s$ $SA = 6s^2$

Triangular Prism



$SA = ah + aw + bw + cw$

1. Find the sum: $3.4 + 6.005$

[1] _____

2. Find the difference: $27.77 - 18.09$

[2] _____

3. Find the product: 23.7×13.67

[3] _____

4. Find the quotient: $9.744 \div 0.87$

[4] _____

Find the greatest common factor of the pair of numbers.

5. 8, 28

[5] _____

6. 36, 42

[6] _____

7. 54, 81

[7] _____

Find the greatest common factor of the pair of numbers.

8. 50, 150

[8] _____

Find the least common multiple of the pair of numbers.

9. 6, 7

[9] _____

10. 10, 15

[10] _____

11. 24, 38

[11] _____

12. 12, 36

[12] _____

Find the least common denominator of the pair of fractions.

13. $\frac{1}{2}, \frac{7}{10}$

[13] _____

14. $\frac{5}{8}, \frac{6}{7}$

[14] _____

15. $\frac{5}{9}, \frac{7}{12}$

[15] _____

16. $\frac{11}{20}, \frac{15}{32}$

[16] _____

Find the reciprocal of the number.

17. 12

[17] _____

Find the reciprocal of the number.

18. $\frac{3}{16}$

[18] _____

19. $\frac{9}{5}$

[19] _____

20. $2\frac{1}{3}$

[20] _____

21. Subtract $\frac{3}{4} - \frac{1}{4}$. Write the answer in simplest form.

[21] _____

22. Add $\frac{1}{2} + \frac{1}{8}$. Write the answer in simplest form.

[22] _____

23. Add $\frac{6}{7}+\frac{5}{9}$. Write the answer in simplest form.

[23] _____

24. Subtract $11\frac{1}{4}-2\frac{5}{8}$. Write the answer in simplest form.

[24] _____

25. Multiply $\frac{1}{2}\times\frac{6}{11}$. Write the answer in simplest form.

[25] _____

26. Divide $\frac{7}{11}\div\frac{3}{5}$. Write the answer in simplest form.

[26] _____

27. Divide $\frac{4}{15}\div\frac{8}{3}$. Write the answer in simplest form.

[27] _____

28. Multiply $4\frac{1}{8}\times\frac{2}{3}$. Write the answer in simplest form.

[28] _____

Write the percent as a decimal and as a fraction in simplest form.

29. 7%

[29] _____

30. 26%

[30] _____

31. 48%

[31] _____

32. 84%

[32] _____

Write the decimal as a percent and as a fraction in simplest form.

33. 0.08

[33] _____

34. 0.15

[34] _____

Write the decimal as a percent and as a fraction in simplest form.

35. 0.47

[35] _____

36. 0.027

[36] _____

Write the fraction as a decimal and as a percent.

37. $\frac{9}{10}$

[37] _____

38. $\frac{4}{5}$

[38] _____

39. $\frac{7}{8}$

[39] _____

Write the fraction as a decimal and as a percent.

40. $\frac{11}{20}$

[40] _____

Compare the two numbers. Write the answer using <, >, or =.

41. 138 and 198

[41] _____

42. 781 and 718

[42] _____

43. 8.4 and 8.2

[43] _____

44. -7.88 and -4.88

[44] _____

45. $\frac{5}{12}$ and $\frac{3}{4}$

[45] _____

Compare the two numbers. Write the answer using <, >, or =.

46. $\frac{3}{6}$ and $\frac{4}{8}$

[46] _____

47. $\frac{5}{3}$ and $1\frac{1}{2}$

[47] _____

48. $16\frac{2}{3}$ and $16\frac{7}{8}$

[48] _____

Write the numbers in order from least to greatest.

49. 0.19, 0.9, 0.49, 0.4

[49] _____

50. -6.5, -5.4, 6.4, -6

[50] _____

Write the numbers in order from least to greatest.

51. $\frac{5}{8}, \frac{4}{7}, \frac{3}{5}, \frac{1}{2}$

[51] _____

52. $\frac{9}{7}, \frac{6}{4}, \frac{5}{4}, \frac{6}{13}$

[52] _____

53. $1\frac{5}{9}, 1\frac{3}{4}, \frac{13}{11}, \frac{7}{5}$

[53] _____

54. $-16\frac{1}{4}, -15\frac{1}{9}, -16\frac{1}{8}, -15\frac{2}{3}$

[54] _____

Find the perimeter.

55. a triangle with sides of length 18 feet, 27 feet, and 32 feet

[55] _____

Find the perimeter.

56. a square with sides of length 4.7 centimeters

[56] _____

Find the area.

57. a square with sides of length 13 yards

[57] _____

58. a rectangle with length 7.7 kilometers and width 4.5 kilometers

[58] _____

Find the volume.

59. a cube with sides of length 19 meters

[59] _____

60. a rectangular prism with length 5.9 inches, width 8.6 inches, and height 1.2 inches

[60] _____

61. The list below shows the distribution of gold medals for the 1998 Winter Olympics. Choose an appropriate graph to display the data.

Germany 12	Norway 10	Russia 9	Canada 6
United States 6	Japan 5	Netherlands 5	Austria 3
South Korea 3	Finland 2	France 2	Italy 2
Switzerland 2	Bulgaria 1	Czech Republic 1	

[61] _____

Find the mean, median, and mode(s) of the data set.

62. 1, 3, 3, 3, 4, 5, 6, 7, 7, 9

[62] _____

63. 17, 22, 36, 47, 51, 58, 65, 80, 85, 89

[63] _____

64. 5, 23, 12, 5, 9, 18, 12, 4, 10, 21

[64] _____

ANSWER KEY

[1] 9.405

[2] 9.68

[3] 323.979

[4] 11.2

[5] 4

[6] 6

[7] 27

[8] 50

[9] 42

[10] 30

[11] 456

[12] 36

[13] 10

[14] 56

[15] 36

[16] 160

[17] $\frac{1}{12}$

[18] $\frac{16}{3}$

[19] $\frac{5}{9}$

[20] $\frac{3}{7}$

[16] 160

[17] $\frac{1}{12}$

[18] $\frac{16}{3}$

[19] $\frac{5}{9}$

[20] $\frac{3}{7}$

[21] $\frac{1}{2}$

[22] $\frac{5}{8}$

[23] $\frac{89}{63}$

[24] $\frac{69}{8}$

[25] $\frac{3}{11}$

[26] $\frac{35}{33}$

[27] $\frac{1}{10}$

[28] $\frac{11}{4}$

[29] $0.07, \frac{7}{100}$

[30] $0.26, \frac{13}{50}$

[31] $0.48, \frac{12}{25}$

[32] $0.84, \frac{21}{25}$

[33] $8\%, \frac{2}{25}$

[34] $15\%, \frac{3}{20}$

[35] $47\%, \frac{47}{100}$

[36] $2.7\%, \frac{27}{1000}$

[37] 0.9, 90%

[38] 0.8, 80%

[39] 0.875, 87.5%

[40] 0.55, 55%

[41] $138 < 198$

[42] $781 > 718$

[43] $8.4 > 8.2$

[44] $-7.88 < -4.88$

[45] $\frac{5}{12} < \frac{3}{4}$

[46] $\frac{3}{6} = \frac{4}{8}$

[47] $\frac{5}{3} > 1\frac{1}{2}$

[48] $16\frac{2}{3} < 16\frac{7}{8}$

[49] 0.19, 0.4, 0.49, 0.9

[50] $-6.5, -6, -5.4, 6.4$

[51] $\frac{1}{2}, \frac{4}{7}, \frac{3}{5}, \frac{5}{8}$

[52] $\frac{6}{13}, \frac{5}{4}, \frac{9}{7}, \frac{6}{4}$

[53] $\frac{13}{11}, \frac{7}{5}, 1\frac{5}{9}, 1\frac{3}{4}$

[54] $-16\frac{1}{4}, -16\frac{1}{8}, -15\frac{2}{3}, -15\frac{1}{9}$

[55] 77 ft

[56] 18.8 cm

[57] 169 yd^2

[58] 34.65 km^2

[59] 6859 m^3

[60] 60,888 $in.^3$

[61] bar graph or circle graph

[62] 4.8, 4.5, 3

[63] 55, 54.5, no mode

[64] 11.9, 11, 5 and 12