Neshaminy School District

MATHEMATICS

Summer Review Packet for Students Entering 6th Grade - Course 1

Dear Parent/Guardian,

This packet is meant to provide your child with a review of the material your child learned in his/her 5th grade math course. Your child should work through the following pages and SHOW ALL work. Please do not allow them to use a calculator. Encourage your child to work through the problems on their own and to do their best.

At the start of the school year, your child should turn this completed packet in to the sixth grade math teacher.

Place Value System Whole Numbers

Write the value of the underlined digit

1) 37,4<u>6</u>2,117

2)   815,392,005

_____

_____

Write the number using words

3) 45, 872 _____

4)   102, 056 _____

Use < > to compare

5)   104, 430 _____ 104, 292

6) 56, 329 _____ 51, 845

7) Order the numbers from least to greatest   4,801   4,299   4,086   493

_____

Round each number to the nearest tens

8) 72 _____

9) 157_____

10)   3246 _____

Round each number to the nearest hundreds

11) 723 _____

12) 3,782 _____

13) 12, 619 _____

Round each number to the nearest thousand

14) 7, 382 _____

15) 106, 974_____

16) 5,372, 029_____

Operations with Whole Numbers

Find the product of each problem.

1.   326 x 5

2.   18 x 12

3.   1,420 x 25

4.   410 x 215

Find the quotient for each problem

5.   8346 ÷ 3

6.   1,287 ÷ 9

7.   420 ÷ 12

8.   5,345 ÷ 10

9.   4,328 ÷ 8

10. 2,304 ÷ 24

Decimals

1. Write in order from least to greatest   8.71   8.352   8.09   8.6

_____

2. Identify the place value of the underlined digit   4.7<u>2</u>3 _____

3. Identify the place value of the underlined digit   12. 06<u>4</u>

Perform the following operations involving decimals.

4.   1.637 + 2.5   5.   25.08 + 4.256

6.   75.4 x 5   7.   1.63 x 2.4

8.   0.005 x 80   9.   0.6 x 1.73

10.   6.18 ÷ 6   11. 34.65 ÷ 9

12.   20.72 ÷ 8   13. 2.16 ÷ 3

Fractions

Write each fraction in simplest form

1. $\dfrac{6}{10}$ 2. $\dfrac{5}{15}$ 3. $\dfrac{8}{12}$ 4. $\dfrac{33}{121}$

Write each mixed number as an improper fraction

5. $1\dfrac{1}{8}$ 6. $2\dfrac{3}{4}$ 7. $5\dfrac{2}{3}$ 8. $4\dfrac{4}{7}$

Write each improper fraction as a mixed number

9. $\dfrac{12}{7}$ 10. $\dfrac{21}{4}$ 11. $\dfrac{30}{7}$ 12. $\dfrac{23}{6}$

Add or subtract. Write you answer in simplest form.

13. $\dfrac{4}{7} + \dfrac{2}{7}$ 14. $\dfrac{3}{8} + \dfrac{3}{8}$ 15. $\dfrac{9}{10} - \dfrac{5}{10}$

Hint don't forget the common denominator for the following problems.

16. $\dfrac{2}{5} + \dfrac{3}{10}$ 17. $\dfrac{1}{4} + \dfrac{5}{8}$ 18. $3\dfrac{1}{7} + 2\dfrac{1}{2}$

19. $\dfrac{7}{9} - \dfrac{1}{3}$ 20. $\dfrac{9}{10} - \dfrac{2}{5}$ 21. $6\dfrac{4}{5} - 2\dfrac{3}{10}$

Fractions Part II

Find the product or quotient. Write your answer in simplest form.

22. $\frac{5}{6} \times \frac{1}{5}$

23. $\frac{4}{9} \times \frac{9}{10}$

24. $1\frac{1}{3} \times 2\frac{3}{4}$

Hint ….when you divide fractions you must find the **reciprocal (flip the 2nd fraction)**

25. $\frac{7}{10} \div \frac{1}{5}$

26. $\frac{11}{12} \div \frac{2}{9}$

27. $3\frac{1}{2} \div 1\frac{1}{8}$

Number Theory

1. List all factors of 48 _____

2. List the first five multiples of 6 _____

3. Find the GCF (greatest common factor) of   16 and 24 _____

4. Find the LCM (least common multiple) of   8 and 10_____

5. Which of the following numbers is prime?   6, 10, 13, 18 _____

6. Write the rule for the pattern   6, 16 , 26, 36 , ……

_____

7. Write the rule for the pattern   5, 21, 85, 341,…..

_____ pg5

PreAlgebra Concepts

Write the following word phrases using numbers and mathematical symbols

1. Twenty added to twelve_____

2. The difference of eight and four_____

3. The product of nine and four_____

4. The quotient of ten and five_____

Simplify the following.

5. $3 + 2 \times 8 \div 4$

6. $48 \div (10 - 4) + 2$

Unit Conversion

7. 10 days = _____ hours

8. 420 min = _____ hours

9. 7 feet = _____ inches

10. 12 yards = _____ feet

11. 200 cm = _____ m

12. 3 Liters = _____ ml

13. 5 lb = _____ oz

14. 8 cups = _____ pt

Geometry

Identify the following shapes or three dimensional figures.

1.

2.

3.

_____

_____

_____
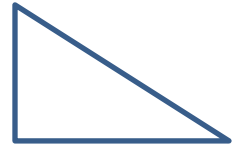
4.
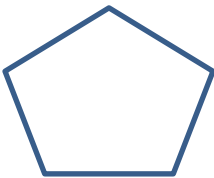
5.
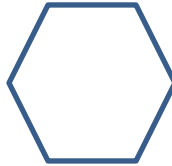
6.

_____

_____

_____

7.
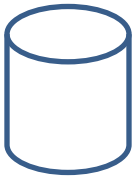
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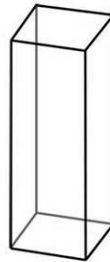
9.

_____

_____

_____
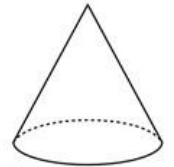
Find the Perimeter of each shape.

10.

19 in

18 in   18 in

19 in

11.

6 in

8 in

12.

9

7

11
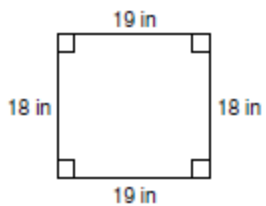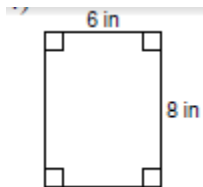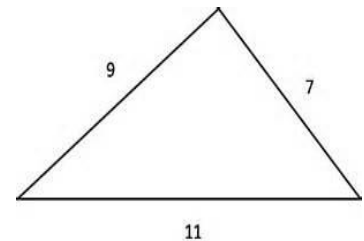
Geometry Part II

Formulas

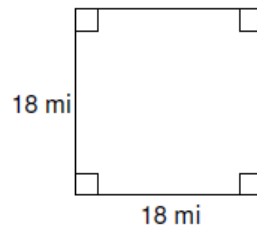Rectangle A = lw   Square A = lw   Parallelogram A =bh   Triangle A = $\frac{b \times h}{2}$
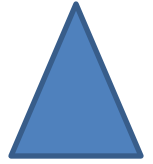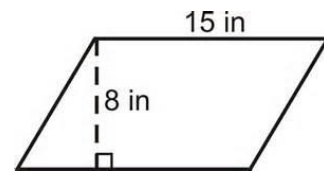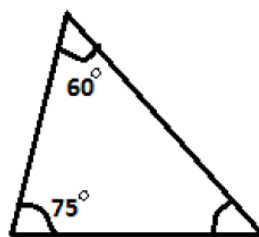
Find the Area of Each Figure

1.

6 in

8 in

2.

18 mi

18 mi

3.

15 in

8 in

5.

6cm

4cm

6.

8cm

4cm
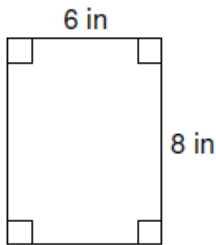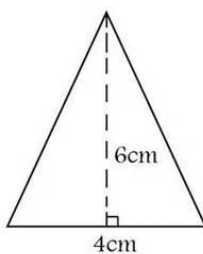
All angles in a triangle add to 180°

Find the unknown angle measure in each triangle.

60°

75°

34°

111°
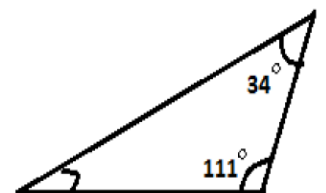
GEOMETRY Part III

Volume Formula   Rectangular Prism $V = lwh$

5 cm

10 cm

2 cm

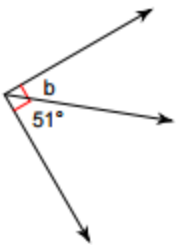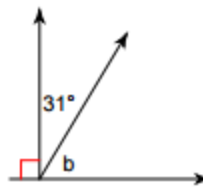Volume =_____

4 in

14 in

11 in
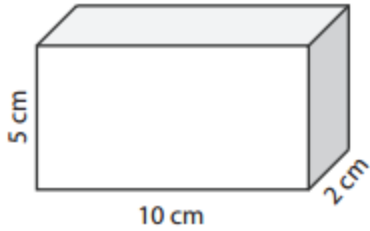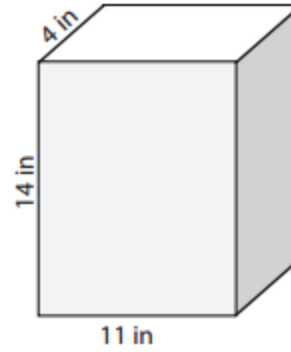
Volume= _____

Complementary Angles add to 90°. Find the missing angle measure in each drawing below.
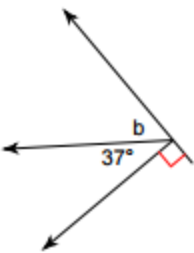
Find the measure of angle b.

1)

b

51°

2)

31°

b

3)

b

37°

4)

52°

b