Incoming Seventh Grade Summer Packet

Each week this summer please complete one of the following review sheets. Please show as much work as you can for each problem. This will help if you are asked how you got the answer. These review sheets will be collected on the first day of school and will be counted as one quiz grade for the first quarter. Each page will count as 5 points out of a total of 80 points. The pages will be graded for accuracy and completion. You may get help from your parents, but do not use a calculator. Doing these review sheets will help you prepare for the seventh grade Pre-Algebra skills.

Have a great summer!! See you soon!

~Mrs. Thangaraj

Name _____

Summer Review - Week # **1**

Please show any work you have done to complete each problem.

Write the place value of the underlined digit. Complete problems 1-8.

Example: 23.4̲56   4 tenths

1. 4.5672̲96   _____

2. 23.48̲6   _____

3. 3.0542̲3   _____

4. 8,4̲56.68   _____

5. 95̲3,023   _____

6. 8.972̲3   _____

Multiple Choice: Circle the correct answer.

7. What is the value of the underlined digit in the number 7.08̲78?

   a. 8 hundreds

   b. 8 thousandths

   c. 8 tenths

   d. 8 hundredths

8. Which number is in the ten-thousands place in the number

   2,130,629.4758?

   a. 6   b. 1   c. 3   d. 2

Rounding whole numbers and decimals.

   1. Round 42,398.567296

    a. to the nearest ten-thousandth

    _____

    b. to the nearest whole number

    _____

    c. to the nearest thousandth

    _____

   2. Round to the nearest cent.

    a. $423.486   _____

    b. $8,456.6888   _____

    c. $58.9999   _____

    d. $58.723   _____

Add, subtract, multiply or divide.

  1. $23 + 408 + 7 + 1,235 =$ _____

  2. $3,006 - 2,547 =$ _____

  3. $57,060 \div 12 =$ _____

  4. $1,042 \times 89 =$ _____

Summer Review - Week # 2

Please show any work you have done to complete each problem.

Add, subtract, multiply, or divide decimals and fractions. (Line up decimal places properly and annex zeros, if needed, before you add or subtract.)

1. $6.53 + .005 + 26.008$ _____

2. $4.59 - 0.399$ _____

3. $7.06 - 5.4$ _____

4. $28.43 + 0.002 + 1.9$ _____

5. 0.095×0.4 _____

6. 28.9×0.103 _____

7. $3.941 \div 0.07$ _____

8. $0.3784 \div 1.1$ _____

Multiply and divide by powers of ten.

To **multiply**, move the decimal places to the **right** as many places as there are zeros in the power of ten. To **divide**, move the decimal places to the **left** as many places as there are zeros in the power of ten.

1. $0.0345 \times 10,000$ _____

2. $12.5 \times 1,000$ _____

3. $13.9 \div 100$ _____

4. $30.035 \times 100,000$ _____

5. $0.0921 \div 10$ _____

6. 9.745×100 _____

7. $846 \div 10,000$ _____

8. $437 \times 1,000$ _____

9. $8.0345 \times 10,000$ _____

10. $12.345 \div 100,000$ _____

11. $0.0003 \times 100,000$ _____

12. $1.0895 \div 10,000$ _____

13. $5.4 \times 10,000$ _____

Summer Review - Week # 3

Please show any work you have done to complete each problem.

Write each improper fraction as a mixed number.

1. $\frac{51}{4}$ _____   2. $\frac{85}{6}$ _____ 3. $\frac{141}{8}$ _____

Write each mixed number as an improper fraction.

1. $7\frac{2}{5}$ _____   2. $21\frac{1}{10}$ _____ 3. $3\frac{4}{7}$ _____

Compare using =, <, or >.

1. $\frac{7}{9}$ _____ $\frac{5}{7}$ 2. $\frac{8}{13}$ _____ $\frac{3}{4}$ 3. $\frac{5}{15}$ _____ $\frac{8}{20}$ 4. $\frac{2}{3}$ _____ $\frac{8}{12}$

Add fractions and mixed numbers. Remember to simplify your answer by reducing to lowest terms or writing as a mixed number.

1. $\frac{7}{9} + \frac{5}{9} =$ _____   6. $\frac{8}{9} + \frac{5}{18} =$ _____

2. $\frac{4}{7} + \frac{1}{3} =$ _____   7. $\frac{11}{15} + \frac{13}{25} =$ _____

3. $20\frac{3}{8} + 14\frac{1}{2} =$ _____   8. $6\frac{1}{4} + 1\frac{5}{6} =$ _____

4. $18\frac{1}{7} + 12\frac{3}{7} =$ _____   9. $2\frac{1}{10} + 1\frac{4}{5} =$ _____

5. $\frac{7}{20} + \frac{5}{12} =$ _____   10. $\frac{1}{4} + \frac{1}{15} =$ _____

Subtract fractions and mixed numbers. Remember to simplify your answer by reducing to lowest terms or writing as a mixed number.

1. $\dfrac{7}{9} - \dfrac{5}{9} =$ _____

6. $\dfrac{8}{9} - \dfrac{5}{18} =$ _____

2. $\dfrac{4}{7} - \dfrac{1}{3} =$ _____

7. $\dfrac{11}{15} - \dfrac{9}{25} =$ _____

3. $20\dfrac{3}{8} - 14\dfrac{1}{2} =$ _____

8. $6\dfrac{1}{4} - 1\dfrac{5}{6} =$ _____

4. $18\dfrac{1}{7} - 12\dfrac{3}{7} =$ _____

9. $2\dfrac{1}{10} - 1\dfrac{4}{5} =$ _____

5. $\dfrac{9}{20} - \dfrac{5}{12} =$ _____

10. $\dfrac{1}{4} - \dfrac{1}{15} =$ _____

Multiply fractions and mixed numbers.

1. $\dfrac{7}{9} \times \dfrac{18}{49} =$ _____

6. $\dfrac{8}{9} \times \dfrac{5}{18} =$ _____

2. $\dfrac{4}{7} \times \dfrac{1}{5} \times \dfrac{7}{16} =$ _____

7. $\dfrac{3}{5} \times \dfrac{7}{12} \times \dfrac{25}{28} =$ _____

3. $2\dfrac{5}{6} \times 4\dfrac{1}{2} =$ _____

8. $2\dfrac{1}{4} \times 18 =$ _____

4. $\dfrac{3}{10} \times 25 =$ _____

9. $2\dfrac{1}{10} \times 1\dfrac{4}{7} =$ _____

5. $\dfrac{7}{20} \times \dfrac{5}{12} =$ _____

10. $\dfrac{1}{4} \times \dfrac{1}{15} =$ _____

Summer Review - Week # 4

Please show any work you have done to complete each problem.

Divide fractions and mixed numbers.

1. $\dfrac{5}{9} \div \dfrac{1}{3} =$ _____

2. $\dfrac{4}{7} \div \dfrac{8}{11} =$ _____

3. $4\dfrac{1}{6} \div 2\dfrac{2}{5} =$ _____

4. $\dfrac{3}{10} \div 25 =$ _____

5. $\dfrac{7}{20} \div \dfrac{3}{10} =$ _____

6. $\dfrac{8}{9} \div \dfrac{5}{18} =$ _____

7. $\dfrac{3}{5} \div \dfrac{12}{125} =$ _____

8. $2\dfrac{1}{4} \div 18 =$ _____

9. $2\dfrac{1}{10} \div 1\dfrac{1}{2} =$ _____

10. $3\dfrac{1}{4} \div \dfrac{13}{16} =$ _____

Write the fraction-decimal-percent equivalents.

Fraction	Decimal	Percent
½		
		25%
¾		
	.2	
2/5		
		60%
4/5		

Find the area of the following shapes:

1. Rectangle: _____

   Length = 5 ft

   Width = 3 ft

2. Square: _____

   Side = 20 ft

3. Circle: _____

   Radius = 10 in.

4. Parallelogram: _____

   Base = 6 ft

   Height = 4 ft

5. Triangle: _____

   Base = 5 ft

   Height = 4 ft

6. Circle: _____

   Diameter = 8 in. (Remember to find the radius first!!)

Summer Review - Week # 5

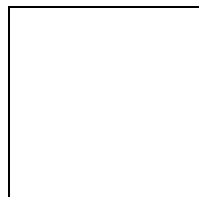*Please show any work you have done to complete each problem.*

Write the fraction-decimal-percent equivalents.

Fraction	Decimal	Percent
$\dfrac{1}{3}$		
		$66\dfrac{2}{3}\%$
$\dfrac{1}{6}$		
$\dfrac{5}{6}$		
	.125	
$\dfrac{3}{8}$		
$\dfrac{5}{8}$		
		$87\dfrac{1}{2}\%$

Find the perimeter / circumference of the following shapes:

7. Rectangle: _____

$3\frac{1}{4}$ ft

$5\frac{1}{2}$ ft

8. Square: _____

2.8 ft
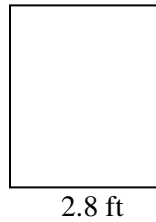
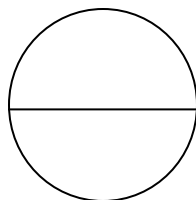9. Circle: _____

Radius = 7 in.

10. Parallelogram: _____

8.5 ft

3.6 ft

11. Triangle: _____

$2\frac{1}{8}\,ft$ $2\frac{1}{8}\,ft$

$2\frac{1}{8}\,ft$
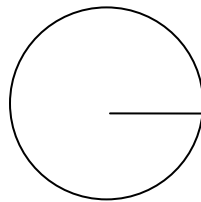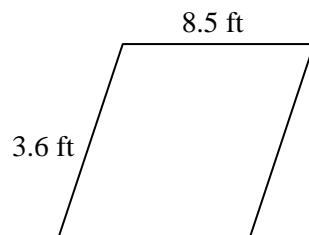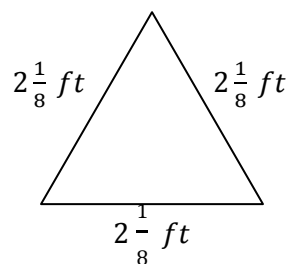
12. Circle: _____

Diameter = 6 in

Summer Review - Week # 6

Please show any work you have done to complete each problem.

Order of Operations:

Remember: PEMDAS (Parenthesis first, exponents second, multiplication and division from left to right, third, and addition and subtraction from left to right, last)

1) $24 \div 2 \cdot 3$

2) $3 + 4 - 2$

3) $33 - 9 \cdot 3$

4) $5 + 4 \cdot 9$

5) $(25 - 10) \div (2 + 3)$

6) $\dfrac{4(2+3)}{13-10\div2}$

7) $2 \cdot (4 + 3)^2$

8) $4^3 + 2 \cdot 2$

9) $4 + 9 \cdot 3^2$

10) $54 - 2 \cdot 3$

Write the fraction-decimal-percent equivalents.

Fraction	Decimal	Percent
2 ¼		
		8 ¾ %
$3\frac{3}{8}$		
$\frac{7}{20}$		
		15%
		$7\frac{3}{8}$%
$1\frac{1}{4}$		

Solve the following percent problems.

1. Find 6% of 360.   _____

   Hint: Multiply

2. Find what percent 25 is of 40.   _____

   Hint: Divide

3. 12 is 20% of what number?   _____

   Hint: Divide

Summer Review - Week # 7

Please show any work you have done to complete each problem.

Solve the following equations. Show all of your work.

1) $x + 5 = 12$
2) $x - 8 = 20$
3) $\frac{x}{9} = 3$
4) $7x = 21$

5) $3x - 6 = 9$
6) $4x + 2 = 10$
7) $7x = 56$

8) $2x - 7 = 3$
9) $13x + 8 = 21$
10) $\frac{x}{4} - 2 = 6$
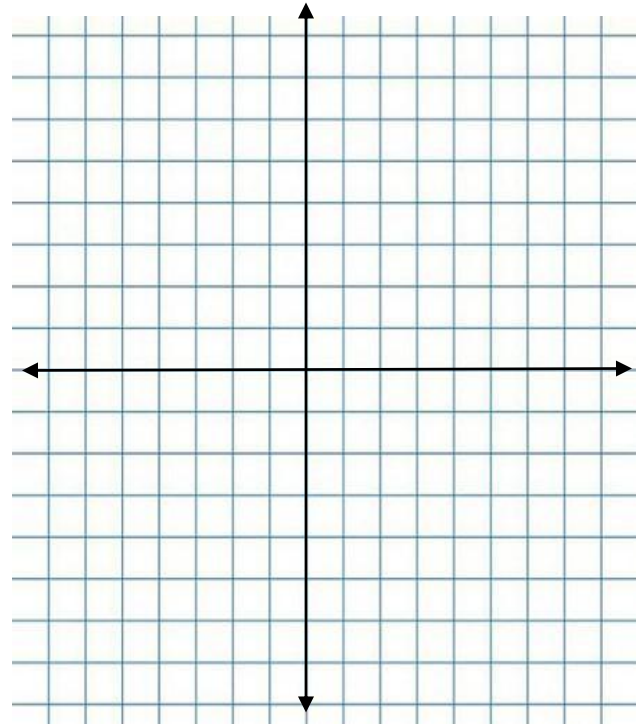
11) $\frac{x}{8} = \frac{3}{12}$
12) $\frac{8}{15} = \frac{x}{9}$
13) $\frac{x}{3} + 2 = 5$

Graph and label each ordered pair on the coordinate plane.
Remember, the first number in an ordered pair is the x-value, and the second number is the y- value. The first one is done for you.

1) A (3, 5)

2) B (-2, 5)

3) C (2, -3)

4) D (3, 6)

5) E (6, 0)

6) F (-1, -4)

7) G (0, -5)

8) I (1, 1)

Solve the following:
1) Find 18 ½ % of 200.

2) 5 is what percent of 60?

3) 12 is 20% of what number?

Summer Review - Week # 8

Please show any work you have done to complete each problem.

Convert the following measures:

1) 3ft. = _____in.

2) $\frac{1}{4}$ft. = _____in.

3) 6 in. = _____ft.

4) 1gal. = _____qt.

5) 5 gal. = _____qt.

6) ½ gal. = _____qt.

7) 12 qt. = _____ gal.

8) 7 qt. = _____ gal.

9) 6 lb. = _____oz.

10) $\frac{3}{4}$ lb. = _____oz.

11) 6 oz. = _____lb.

12) 2 bu. = _____pk.

13) 5 pk. = _____bu.

14) 5 pt. = _____fl. oz.

Add, subtract, or multiply compound measures:

1) 9 hr. 6 min.
    4 hr. 5 min.
 + 8 hr. 9 min.
   _____

2)   25 lb.
    _ 7 lb. 7 oz.
      _____

3)   8 gal. 2 qt.
       ×   9
      _____

4) 8 pk. 3 qt.
 _ 3 pk. 5 qt.
   _____

5) 3 lb. 13 oz.
   +4 lb. 12 oz.
   _____

6)   7 hr. 45 min.
       ×   4
      _____

Convert the following temperatures to the given temperature scales:

Formulas:

$$C = \frac{5}{9} \times (F - 32) \; ; \quad F = \frac{9}{5} \times C + 32$$

1) 45°C = _____°F

2) 28°C = _____°F

3) 56°F = _____°C

4) 77°F = _____°C