

Summer Math Packet for Students Entering 7th Grade

Name _____

You must show all work.

Write the place value of the underlined digit.

Example: 23.456 4 tenths

1. 4.567296 _____

2. 23.486 _____

3. 3.05423 _____

4. 8,456.68 _____

5. 953,023 _____

6. 8.9723 _____

Multiple Choice: Circle the correct answer.

7. What is the value of the underlined digit in the number 7.0878?
- 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

Add, subtract, multiply or divide.

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

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

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

Add, subtract, multiply, or divide decimals and fractions.

1. $6.53 + .005 + 26.008$ _____

2. $4.59 - 0.399$ _____

3. $7.06 - 5.4$ _____

4. $28.43 + 0.002 + 1.9$ _____

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 _____

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. $37\frac{4}{7}$ _____

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.

$$1. \frac{7}{9} + \frac{5}{9} = \underline{\hspace{2cm}}$$

$$2. \frac{4}{7} + \frac{1}{3} = \underline{\hspace{2cm}}$$

$$3. 20\frac{3}{8} + 14\frac{1}{2} = \underline{\hspace{2cm}}$$

$$4. 18\frac{1}{7} + 12\frac{3}{7} = \underline{\hspace{2cm}}$$

$$5. \frac{7}{20} + \frac{5}{12} = \underline{\hspace{2cm}}$$

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

$$1. \frac{7}{9} - \frac{5}{9} = \underline{\hspace{2cm}}$$

$$2. \frac{4}{7} - \frac{1}{3} = \underline{\hspace{2cm}}$$

$$3. 20\frac{3}{8} - 14\frac{1}{2} = \underline{\hspace{2cm}}$$

$$4. 18\frac{1}{7} - 12\frac{3}{7} = \underline{\hspace{2cm}}$$

$$5. \frac{9}{20} - \frac{5}{12} = \underline{\hspace{2cm}}$$

Multiply fractions and mixed numbers.

$$1. \frac{7}{9} \times \frac{18}{49} = \underline{\hspace{2cm}}$$

$$2. \frac{4}{7} \times \frac{1}{5} \times \frac{7}{16} = \underline{\hspace{2cm}}$$

$$7. \frac{3}{5} \times \frac{7}{12} \times \frac{25}{28} = \underline{\hspace{2cm}}$$

$$3. 2\frac{5}{6} \times 4\frac{1}{2} = \underline{\hspace{2cm}}$$

$$4. \frac{3}{10} \times 25 = \underline{\hspace{2cm}}$$

$$5. \frac{7}{20} \times \frac{5}{12} = \underline{\hspace{2cm}}$$

Divide fractions and mixed numbers.

$$1. \frac{5}{9} \div \frac{1}{3} = \underline{\hspace{2cm}}$$

$$2. \frac{4}{7} \div \frac{8}{11} = \underline{\hspace{2cm}}$$

$$3. 4\frac{1}{6} \div 2\frac{2}{5} = \underline{\hspace{2cm}}$$

$$4. \frac{3}{10} \div 25 = \underline{\hspace{2cm}}$$

Write the fraction-decimal-percent equivalents.

Fraction	Decimal	Percent
$\frac{1}{2}$		
		25%
$\frac{3}{4}$		
	.2	
$\frac{2}{5}$		
		60%
$\frac{4}{5}$		

Write the fraction-decimal-percent equivalents.

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

Write the fraction-decimal-percent equivalents.

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

Find the area of the following shapes:

1. Rectangle: _____

Length = 5 ft

Width = 3 ft

2. Square: _____

Side = 20 ft

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) $\frac{4(2+3)}{13-10 \div 2}$

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

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) $7x = 56$

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.

- 1) A (3, 5)
- 2) B (-2, 5)
- 3) C (2, -3)
- 4) D (3, 6)
- 5) E (6, 0)

