

Summer Math Packet

Pre-Algebra Students:

You are expected to understand and recall content from the problems in this packet to build off of for the material covered this new school year. This first semester will work with numerical calculations that are done **WITH OUT THE USE OF A CALCULATOR**. You may use a times table chart to accommodate for this.

Write each as a percent.

1) 0.21

2) 2.598

Write each as a decimal.

3) 576%

4) 12%

Write each as a fraction. Be sure to simplify!

5) 0.92

6) 0.04

7) 1%

8) 56%

Evaluate each expression.

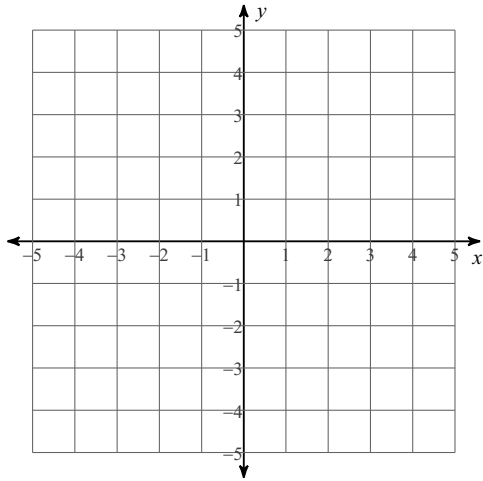
9) $\frac{2}{5} + \frac{1}{5}$

10) $\frac{12}{7} - \frac{1}{2}$

11) $4\frac{1}{8} + \frac{1}{2}$

Plot each point and label the point with the letter.

12) $P(-5, -5)$ $Q(3, -5)$ $R(-5, -2)$
 $S(-4, 0)$ $T(5, 1)$



Evaluate each expression.

13) $6 + (-3)$

14) $(-7) + (-7)$

15) $2 - (-7)$

16) $(-6) - 1$

Find each product.

17) $-10 \cdot -10$

18) $-9 \cdot 6$

19) $-4 \cdot -3 \cdot -2$

20) $6 \cdot -1 \cdot -5$

Find each quotient.

21) $-70 \div 7$

22) $-14 \div -2$

23) $\frac{-45}{-5}$

24) $\frac{0}{-10}$

Evaluate each expression.

25) $-5 + -6 - 3 \cdot -5$

26) $4 + -2 - -1 - -3$

Solve each equation. Use a property of equality. Show your work.

27) $a - 3 = 10$

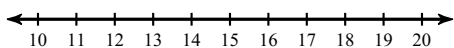
28) $a + 6 = 13$

29) $\frac{7}{8} = \frac{k}{16}$

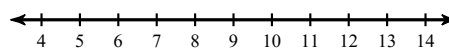
30) $7n = 126$

Solve each inequality and graph its solution. Use a property of inequality to show your work.

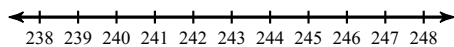
31) $n - 12 \geq 1$



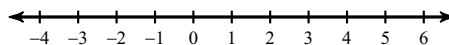
32) $p + 10 < 16$



33) $\frac{x}{16} < 15$



34) $3x \geq 0$



Find the LCM of each.

35) 16, 40

36) 25, 10

Find each square root from the perfect square.

You should know your times tables up to $12 \times 12 = 144$ squared.

37) $\sqrt{1}$

38) $\sqrt{100}$

39) $\sqrt{9}$

40) $\sqrt{4}$

Simplify each expression.

41) $4(4x + 7)$

42) $5(3v - 8)$

43) $6b + 4 - 4b$

44) $9a + 5 + 3$

Find each product.

45) $\frac{1}{8} \times \frac{3}{4}$

46) $\frac{15}{8} \times \frac{13}{10}$

47) $2\frac{6}{7} \times 5\frac{7}{10}$

Find each quotient.

48) $\frac{7}{9} \div \frac{1}{5}$

49) $\frac{1}{2} \div \frac{2}{9}$

50) $4\frac{5}{7} \div 1\frac{4}{5}$

Evaluate each expression.

51) $5.2 + 5.66$

52) $4.4 - 3.1$

53) $6.5 + 7.9$

Find each product.

54) 0.7×2.8

55) 4.9×2.2

56) 3.1×9.8

Find each quotient.

57) $7.5 \div 5$

58) $4.8 \div 1.5$

59) $9.2 \div 2.5$

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Write each as a percent.

1) 0.21

$$21\%$$

2) 2.598

$$259.8\%$$

Write each as a decimal.

3) 576%

$$5.76$$

4) 12%

$$0.12$$

Write each as a fraction. Be sure to simplify!

5) 0.92

$$\frac{23}{25}$$

6) 0.04

$$\frac{1}{25}$$

7) 1%

$$\frac{1}{100}$$

8) 56%

$$\frac{14}{25}$$

Evaluate each expression.

9) $\frac{2}{5} + \frac{1}{5}$

$$\frac{3}{5}$$

10) $\frac{12}{7} - \frac{1}{2}$

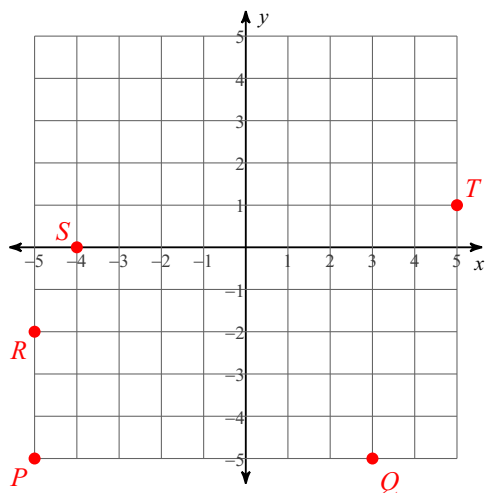
$$1\frac{3}{14}$$

11) $4\frac{1}{8} + \frac{1}{2}$

$$4\frac{5}{8}$$

Plot each point and label the point with the letter.

12) $P(-5, -5)$ $Q(3, -5)$ $R(-5, -2)$
 $S(-4, 0)$ $T(5, 1)$



Evaluate each expression.

13) $6 + (-3)$
 3

15) $2 - (-7)$
 9

14) $(-7) + (-7)$
 -14

16) $(-6) - 1$
 -7

Find each product.

17) $-10 \cdot -10$
 100

19) $-4 \cdot -3 \cdot -2$
 -24

18) $-9 \cdot 6$
 -54

20) $6 \cdot -1 \cdot -5$
 30

Find each quotient.

21) $-70 \div 7$
 -10

23) $\frac{-45}{-5}$
 9

22) $-14 \div -2$
 7

24) $\frac{0}{-10}$
 0

Evaluate each expression.

25) $-5 + -6 - 3 \cdot -5$
 4

26) $4 + -2 - -1 - -3$
 6

Solve each equation. Use a property of equality. Show your work.

27) $a - 3 = 10$

$a = 13$

28) $a + 6 = 13$

$a = 7$

29) $\frac{7}{8} = \frac{k}{16}$

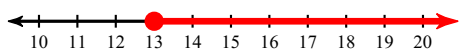
$k = 14$

30) $7n = 126$

$n = 18$

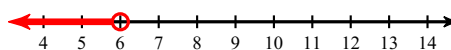
Solve each inequality and graph its solution. Use a property of inequality to show your work.

31) $n - 12 \geq 1$



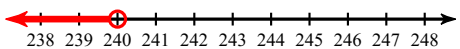
$n \geq 13$

32) $p + 10 < 16$



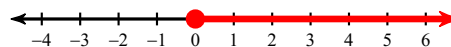
$p < 6$

33) $\frac{x}{16} < 15$



$x < 240$

34) $3x \geq 0$



$x \geq 0$

Find the LCM of each.

35) 16, 40

80

36) 25, 10

50

Find each square root from the perfect square.

You should know your times tables up to 12x12=12 squared.

37) $\sqrt{1}$

1

38) $\sqrt{100}$

10

39) $\sqrt{9}$

3

40) $\sqrt{4}$

2

Simplify each expression.

41) $4(4x + 7)$

$16x + 28$

42) $5(3v - 8)$

$15v - 40$

43) $6b + 4 - 4b$

$2b + 4$

44) $9a + 5 + 3$

$9a + 8$

Find each product.

$$45) \frac{1}{8} \times \frac{3}{4}$$
$$\frac{3}{32}$$

$$46) \frac{15}{8} \times \frac{13}{10}$$
$$2\frac{7}{16}$$

$$47) 2\frac{6}{7} \times 5\frac{7}{10}$$
$$16\frac{2}{7}$$

Find each quotient.

$$48) \frac{7}{9} \div \frac{1}{5}$$
$$3\frac{8}{9}$$

$$49) \frac{1}{2} \div \frac{2}{9}$$
$$2\frac{1}{4}$$

$$50) 4\frac{5}{7} \div 1\frac{4}{5}$$
$$2\frac{13}{21}$$

Evaluate each expression.

$$51) 5.2 + 5.66$$
$$10.86$$

$$52) 4.4 - 3.1$$
$$1.3$$

$$53) 6.5 + 7.9$$
$$14.4$$

Find each product.

$$54) 0.7 \times 2.8$$
$$1.96$$

$$55) 4.9 \times 2.2$$
$$10.78$$

$$56) 3.1 \times 9.8$$
$$30.38$$

Find each quotient.

$$57) 7.5 \div 5$$
$$1.5$$

$$58) 4.8 \div 1.5$$
$$3.2$$

$$59) 9.2 \div 2.5$$
$$3.68$$