2.5a Translate to an Algebraic Expression June 1st, 2020

Addition

_____ 1. The **sum** of a and 8

_____ 2. 4 **plus** c

_____ 3. 16 **added to** m

_____ 4. 20 **more than** f

_____ 5. T **increased by** r

Subtraction

_____ 1. The **difference of** 23 and p

_____ 2. 550 **minus** h

*_____ 3. W **less than** 25

_____ 4. 7 **decreased by** j

_____ 5. M **reduced by** x

*_____ 6. 12 **subtracted from** l

Multiplication

_____ 1. The **product of** 4 and x

_____ 2. 20 **times** b

_____ 3. **Twice** x

_____ 4. $\frac{3}{4}$ **of** m

_____ 5. 7 **multiplied by** x

Division

_____ 1. The **quotient of** r and 19

_____ 2. x **divided by** d

_____ 3. The **ratio of** c to d

_____ 4. The price p **per** gallon g

Mixed Practice

_____ 1. Eight more than one – fourth of d

_____ 2. Five less than twice a number

_____ 3. Seven increased by the product of two numbers

_____ 4. one half of some number

_____ 5. A number m plus six times n

_____ 6. The sum of m and n

_____ 7. Thirty-four divided by x

_____ 8. The quotient of two numbers subtracted from 20

_____ 9. The product of six and three less than the number

_____ 10. Twice the sum of a number and eight

Words indicating equality, = : is the same as, equal, **is**, are

Let n represent the **number** and translate each phrase or sentence. June 1st, 2020.

1. Four more than a number.
2. Four times a number
3. Four less than a number
4. A number increased by four
5. A number decreased by four
6. The product of four and a number
7. Six more than five times a number
8. Six less than five times a number
9. Nine less than twice a number
10. A number divided by 7
11. The product of a number and seven more than the number
12. The product of a number and seven less than the number
13. Eight less than twice a number is fourteen.
14. One less than three times a number is seven.
15. Four more than five times a number is two less than the number.
16. Ten less than a number is three more than six times the number.
17. Twice the sum of a number and 3 is 20.

Name _____ Period _____ Date June 3rd, 2020

Writing and Evaluating Expressions Worksheet

Evaluate each expression using the values $m = 7$, $r = 8$, and $t = 2$.

1. $5m - 6$

2. $4m + t$

3. $\frac{r}{t}$

4. mt

5. $5t + 2m$

6. rm

7. $3m - 5t$

8. $\frac{mr}{t}$

Write a word phrase for each algebraic expression.

10. $n + 16$

11. $3.2n$

12. $25.6 - n$

13. $\frac{n}{24}$

14. $\frac{24}{n}$

15. $n - 15$

Write an algebraic expression for each word phrase.

16. 12 more than m machines

17. six times the daily amount of fiber f in your diet

18. your aunt's age a minus 25

19. the total number of seashells s divided by 10

20. 9 less than k

21. m divided by 6

June 3rd, 2020

22. twice x

23. 4 more than twice x

24. For a walk-a-thon a sponsor committed to give you a flat fee of \$5 plus \$2 for every mile m you walk.

a. Write an expression for the total amount you will collect from your sponsor at the end of the walk-a-thon.

b. Then evaluate your expression for 20 miles walked.

25. You and four friends plan a surprise party. Each of you contributes the same amount of money m for food.

a. Write an algebraic expression for the total amount of money contributed for food.

b. Evaluate your expression if each person contributed \$5.25.

26. A cell phone company charges \$40 per month plus a \$35 activation fee.

a. Write an expression for the total cost for m months.

b. Then evaluate your expression for 10 months of service.

Name _____ Period _____ Date June 8th, 2020

Solving One-Step Equations 1

You must show your work to get credit!! Check your answer.

Adding and Subtracting

1) $y+6=20$

2) $x-10=12$

3) $12+z=15$

4) $2+n=16$

5) $a+4=14$

6) $m-5=-10$

7) $4+b=30$

8) $10+c=25$

9) $x-60=20$

10) $g-16=4$

11) $x-15=-20$

12) $w+14=10$

13) $r-18=27$

14) $13+k=25$

15) $f-16=34$

16) $j+17=19$

17) $r-16=5$

18) $9+t=56$

June 10th, 2020

Multiplying and Dividing

19) $2x = 16$

20) $15 = 3t$

21) $\frac{k}{2} = 6$

22) $3h = 27$

23) $\frac{j}{3} = 4$

24) $6p = 30$

25) $\frac{n}{10} = 40$

26) $\frac{h}{4} = 15$

27) $9s = 81$

28) $14 = 2c$

29) $26 = 13d$

30) $6 = \frac{m}{3}$

31) $7 = \frac{p}{5}$

32) $4w = 16$

33) $\frac{f}{3} = 9$

34) $20 = 4x$

35) $3z = 36$

36) $10 = \frac{j}{6}$

June 15th, 2020

6.3.6 ~ Solve 2-step equations

Example: $4x + 7 = 31$

Step 1. Undo the addition or subtraction by doing the inverse operation.

☻ **Remember ~ what you do to one side of the equal sign, you must do to the other!**

$$\begin{array}{r} 4x + 7 = 31 \\ -7 \quad -7 \\ \hline 4x \quad = 24 \end{array}$$

Step 2. Undo the multiplication or division by doing the inverse operation.

☻ **Remember ~ what you do to one side of the equal sign, you must do to the other!**

$$\frac{4x}{4} = \frac{24}{4}$$

$$x = 6$$

Name _____ Date June 15th, 2020

6.3.6 Two-step Equation Worksheet

Directions: solve each equation. Use mental math to check the solution.

1. $7m + 8 = 71$

2. $\frac{y}{7} + 6 = 11$

3. $12x + 2 = 146$

4. $\frac{m}{9} - 17 = 21$

5. $2a - 1 = 19$

6. $\frac{c}{9} - 8 = 17$

7. $4f + 11 = 29$

8. $13n - 9 = 17$

9. $\frac{e}{5} - 14 = 8$

10. $4w - 26 = 82$

11. $3n - 8 = 4$

12. $2n - 3 = 9$

13. $\frac{n}{5} - 4 = 11$

14. $\frac{z}{2} + 1 = 9$

15. $2y + 16 = 10$

16. $3n + 2 = 12$

17. $4n - 8 = 5$

18. $\frac{n}{2} + 5 = 15$

19. $5v - 42 = 73$

20. $3d - 13 = 11$

June 15th, 2020

6.3.6 Quiz

1.) $8n + 7 = 31$

2.) $9n - 9 = 9$

3.) $\frac{n}{2} - 10 = 6$

4.) $15 = 4m - 5$

5.) $3 = 2 + \frac{v}{4}$

[redacted] - Infinite Algebra 1

Name_____

Two-Step Equations

Date June 17th, 2020 Period____

Solve each equation.

1) $6 = \frac{a}{4} + 2$

2) $-6 + \frac{x}{4} = -5$

3) $9x - 7 = -7$

4) $0 = 4 + \frac{n}{5}$

5) $-4 = \frac{r}{20} - 5$

6) $-1 = \frac{5 + x}{6}$

7) $\frac{v + 9}{3} = 8$

8) $2(n + 5) = -2$

9) $-9x + 1 = -80$

10) $-6 = \frac{n}{2} - 10$

11) $-2 = 2 + \frac{v}{4}$

12) $144 = -12(x + 5)$

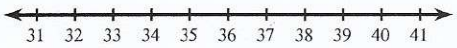
Algebra 1 Name_____ ID: 1

One-Step Inequalities

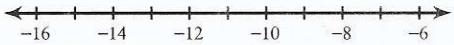
Date June 22, 2020 Period____

Solve each inequality and graph its solution.

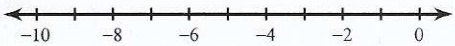
1) $\frac{x}{9} > 4$



2) $a - 5 \geq -14$

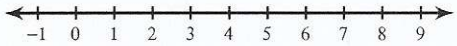


3) $n + 5 > -3$

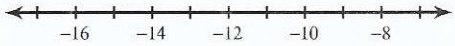


4) $\frac{k}{7} \geq -\frac{1}{7}$

5) $r + 5 \leq 11$

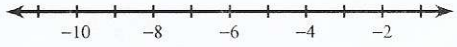


6) $6 + x \geq -3$

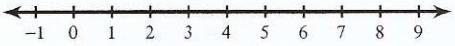


7) $9 + x < 4$

8) $v - 6 \leq -14$

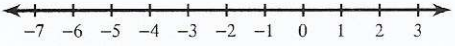


9) $v + 8 < 10$

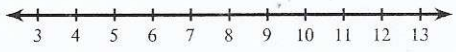


10) $b - 9 > -6$

11) $x - 9 \leq -8$



12) $-10x \geq -90$



Jun 24th, 2020

Name: _____ Score:

Two-step Inequalities

Solve the inequalities:

1) $4x + 1 < 9$

2) $2x + 5 > 7$

3) $\frac{x-6}{4} > 2$

4) $3x - 4 \geq 8$

5) $2x - 8 < 4$

6) $\frac{x}{4} - 3 < 9$

7) $9x - 4 > 5$

8) $3x + 7 < 4$

9) $\frac{x}{6} - 1 < 3$

10) $7x + 6 \geq 20$

11) $\frac{x}{6} + 8 > 2$

12) $\frac{x-4}{3} > 10$

13) $\frac{x}{6} - 9 \leq 1$

14) $5x - 1 \leq 4$

15) $5x + 12 > 2$

16) $2x + 11 > 3$

17) $\frac{x-4}{3} \geq 5$

18) $\frac{x}{6} - 2 \leq 3$