

Algebra I

Name: _____

Date: _____

Hour: _____

Homework 4.2- # 2 -Multiplying and Dividing Expressions

Simplify the following expressions.

1.) $(3x + 2y - 9) - 2(x - y)$

2.) $4(x - 5y) - (2x - 2y)$

3.) $\frac{5w+15}{-5}$

4.) $8(x - y) + 5(3x - 3y)$

5.) $(3x + 5y - 9) - 7(x - y)$

6.) $\frac{8+16w}{8}$

7.) $\frac{-90x+2.7}{-9}$

8.) $-(x - y) - 4(x + y + 9)$

9.) $9(2x + y) - 3(3x + 3y)$

10.) $\frac{11-33y}{11}$

11.) $\frac{-10x+35}{5}$

12.) $-6(4x - y) - 4(2x - 3y)$

Algebra I

13.) A computer program shows the formula $A = -5 \cdot B + B$. What is the value of A when B is 3?

Wages- If Nicole earns \$5.25 per hour; find her earnings for the following 4 days.

14.) 4 hours on Friday

15.) 6.5 hours on Saturday

16.) h hours on Monday

17.) $(h + 1)$ hours on Tuesday

18.) Write an expression in simplified form that shows the total number of hours Nicole worked for the 4 days.

19.) **Geometry-** The formula for area is $A = lw$. Find the area of the rectangle by evaluating the formula for the given length and width.

20.) **Geometry-** Evaluate the formula $V = lwh$ of a rectangular prism with the given dimensions.

Algebra I

Charlie is a plumber who charges \$35 an hour, plus a fixed service fee of \$20 per job.

How much does Charlie charge for a job that takes...

21.) 1 hour?

22.) 3 hours?

23.) h hours?

On Sundays, Charlie doubles his charges. How much does he charge for a job that takes...

24.) 1 hour?

25.) 3 hours?

26.) h hours?

Add like terms.

26.) $(3x + 2y) + (3x - 2y) - (3x - 2y)$

27.) $(x^2 + 2y + 4) - (2x - 3y - 2)$

Algebra I

Solve each inequality.

28.) $x - 4 \leq 3$

29.) $x + 5 \geq -2$

30.) $x < -3 + 4$

31.) Find the average of 2, 3, 4, 5, and 6.

Simplify.

32.) $2(-3 + c)$

33.) $-6(-4 + x)$

34.) $4(2x + 4)$