

Class Name : **8A - A**Instructor Name : **Ms. Ryan**

Student Name : \_\_\_\_\_

Instructor Note : \_\_\_\_\_

1. Translate the sentence into an equation.

*Seven more than the product of a number and 3 is 9.*

Use the variable  $x$  for the unknown number.

2. Translate this sentence into an equation.

*The product of 4 and Matt's height is 52.*

Use the variable  $m$  to represent Matt's height.

3. Solve for  $w$ .

$$-6 + w = 8$$

4. Solve for  $v$ .

$$\frac{v}{4} = 76$$

Simplify your answer as much as possible.

5. Solve for  $y$ .

$$-20 = -5y$$

Simplify your answer as much as possible.

6. Solve for  $u$ .

$$-6 + 4u = -22$$

Simplify your answer as much as possible.

7. Solve for  $u$ .

$$14 + 12u = -16 + 9u$$

Simplify your answer as much as possible.

8. Solve for  $u$ .

$$7u + 4(u - 7) = 27$$

Simplify your answer as much as possible.

9. Evaluate the following.

$$|-4 + 9| =$$

$$|-4| + 9 =$$

10. Evaluate the following.

$$|-4 + 7| =$$

$$|-4| + 7 =$$

11. Solve for  $u$ .

$$|5u - 10| = 0$$

12. Solve for  $u$ .

$$|4u| - 32 = -32$$

13. Solve for  $x$ .

$$\frac{2}{4} = \frac{x}{6}$$

Simplify your answer as much as possible.

14. Solve the following proportion for  $v$ .

$$\frac{3}{8} = \frac{v}{11}$$

Round your answer to the nearest tenth.

15. Solve for  $x$ .

$$\frac{12}{x+3} = \frac{8}{5}$$

Simplify your answer as much as possible.

16. Solve for  $x$ .

$$\frac{x+8}{18} = \frac{2}{3}$$

Simplify your answer as much as possible.

17. There is a sales tax of \$25 on an item that costs \$310 before tax. The sales tax on a second item is \$10. How much does the second item cost before tax?

18. Leila made \$95 for 5 hours of work.

At the same rate, how much would she make for 9 hours of work?

19. Solve for  $q$ .

$$q - r + s = P$$

20. Solve for  $m$ .

$$mx = y$$

21. Solve for  $x$ .

$$7(x + a) = y$$

## Unit 2 Test #1 Answers for class 8A - A

1.  $3x + 7 = 9$

2.  $4m = 52$

3.  $w = 14$

4.  $v = 304$

5.  $y = 4$

6.  $u = -4$

7.  $u = -10$

8.  $u = 5$

9.

$$|-4 + 9| = 5$$

$$|-4| + 9 = 13$$

10.

$$|-4 + 7| = 3$$

$$|-4| + 7 = 11$$

11.  $u = 2$

12.  $u = 0$

13.  $x = 3$

14.  $v = 4.1$

15.  $x = \frac{9}{2}$

16.  $x = 4$

17. \$124

18. \$171.

19.  $q = P + r - s$

20.  $m = \frac{y}{x}$

21.  $x = \frac{y}{7} - a$