

Name: _____ Date: _____ Per: _____

Chapter 3 Practice Test

Show all of your work for each problem. If you do not show your work you will not receive credit.

Solve each equation.

1. $108r = 9$

2. $4x + 8 = 21$

3. $12(c + 3) - 30 = 12c + 36$

4. $3(y + 4) - y = 12 - y$

5. $\frac{2}{3} - s = \frac{5}{6}$

6. $6x - 4(x - 3) = 24 - 2x$

7. $4(6a + 3) = 6(4a + 2)$

Solve each proportion.

8. $\frac{6}{x+4} = \frac{12}{5x-13}$

9. $\frac{7v}{4v+6.5} = \frac{2}{3}$

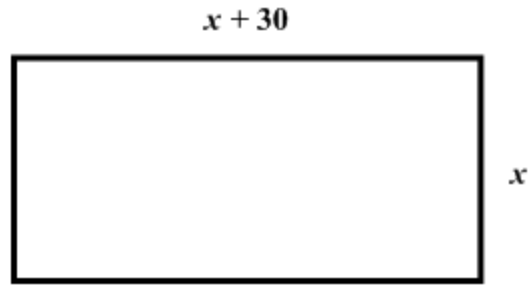
10. $\frac{5}{3a+8} = \frac{-2}{a-1}$

11. What percent of 80 is 94.4?

Solve each problem. Show all of your work.

12. The rectangle below has a perimeter of 860 feet.

A) Write a simplified equation to represent the situation.



B) Solve for x .

13. A simple syrup used for ice cream toppings requires 2 cups of sugar and $\frac{2}{3}$ cups of boiling water. How much cups of sugar are required for 2 cups of boiling water?

14. Verizon Fios charges an installation fee of \$100 plus an additional \$104.99 for cable and internet. Comcast does not charge an installation fee, but their monthly fee is \$129.99.

a) When will the two companies have the same cost?

b) How many months of service would make you decide to choose Verizon?

For numbers 15 and 16, write the following equations in function form.

15. $3x - y + 2 = 10$

16. $8x + 4y = -20$