

Solve the proportion.

1.  $\frac{2}{3} = \frac{10}{2x-19}$

$$x = 17$$

Solve.

2.  $\frac{2x+4}{3x-1} = \frac{1}{2}$

$$x = -9$$

Simplify.

3.  $(45 \div 3 + 23 - 2) \div 4 * 2 + 3^2$

$$27$$

4.  $\frac{-4}{3} * \frac{18}{-5} * \frac{-21}{12}$

$$\frac{-42}{5}$$

Solve the equation. Use properties of equality to justify each step.

5.  $-6(-5x + 6) - 100 = 194$

$$x = 11$$

6.  $0.8x + 3.1 - 4.3x = 7.7 - 1.2x$

$$x = -2$$

7. The average person commutes to work at a rate of 2908 centimeters/second. How fast are they traveling in miles/hour?

65.1 mph

8. This morning Mr. Sacco filled up his gas tank. The price at the pump was \$3.29 per gallon. He then went inside to get his morning coffee. For a 20 oz. coffee he paid \$1.29. Write an explanation of what each piece of the following inequality represents in the context of the problem.

$$3.29g + 1.29 \leq 50$$

a. 1.29: \_\_\_\_\_

b. 3.29: \_\_\_\_\_

c. 3.29g: \_\_\_\_\_

d. 50: \_\_\_\_\_

see teacher

e. What is the appropriate vocabulary word for 1.29? constant

f. What is the appropriate vocabulary word for 3.29? coefficient

g. Why is an inequality used in this situation?

don't have to spend all \$50  
cannot spend more than \$50