

Name: _____

Date: _____

Section 8.3 Extra Practice

1. Identify the errors in each of the following, then correctly solve.

a) $0.4(x + 2.2) = 5.4$

$$0.4x + 2.2 = 5.4$$

$$0.4x = 3.2$$

$$x = 8$$

b) $\frac{x+3}{5} = \frac{4}{7}$

$$5\left(\frac{x+3}{5}\right) = \frac{4}{7}$$

$$x + 3 = \frac{4}{7}$$

$$x = \frac{-17}{7}$$

2. Solve each of the following.

a) $2(x - 4) = 12$

b) $3(m + 0.5) = -2.1$

c) $1.2(x + 1.3) = 2.4$

d) $\frac{3}{4}(x - 8) = 7\frac{1}{2}$

e) $\frac{x+14}{4} = 2\frac{1}{2}$

f) $\frac{x-2}{3} = \frac{-7}{18}$

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4. Create an equation for each of the following. Then solve.

a) The perimeter of a square is 49.2cm . The side length of the square is represented by the expression $(x + 4.1)\text{cm}$. What is the value of x ?

b) A fraction has the denominator of 20. The numerator has a value of " x less than the denominator". If the fraction is equivalent to $\frac{1}{4}$, what is the value of x ?

c) Two cars leave Calgary at the same time, travelling in opposite directions. Their average speeds differ by 5km/h . After 2hrs they are 210km apart. Find the speed of each car?

d) A number, plus one-third of itself, plus one-eighth of itself, equals 70. What is the number?