Section 8.2 Extra Practice

1. Solve each equation. Use each of the following once: an algebraic method, a diagram, and concrete materials.

a) $2x + \dfrac{1}{4} = \dfrac{1}{2}$ **b)** $\dfrac{m}{2.5} + 1.5 = 0.8$ **c)** $4x - 7 = 29$

2. Solve each equation. Then, check your answer.

a) $2\dfrac{3}{4} = 3m + \dfrac{1}{2}$ **b)** $\dfrac{1}{2}x + \dfrac{1}{3} = \dfrac{7}{6}$ **c)** $\dfrac{n}{-0.6} + 0.23 = 1.93$

d) $3.4 + \dfrac{x}{1.4} = 4.5$ **e)** $4c + \dfrac{2}{3} = \dfrac{-1}{6}$ **f)** $-9.2 = 0.2x + 2.4$

3. Create an equation for each of the following. Solve. Then, check.
   a) When a number is tripled, then increased by 13, the result is 82. Find the number.
   b) Jane spent $42 for shoes. This was $14 less than twice what she spent for a blouse. How much was the blouse?
   c) The sum of two consecutive numbers is 37. What are the numbers?
   d) The cost of a banquet at Nick's Catering is $215 plus $27.50 per person. If the total cost of a banquet was $2827.50, how many people were invited?
   e) Effie and Kirsten live 23.6 km apart. They decided to cycle to the pool at the park, which is located between their homes. If Jennifer lives 5.2 km closer to the park, how far did they each cycle?
   f) Hyan has saved $300 more than two-thirds of the cost of the down payment on a car. If he has $1240 saved, how much is the down payment?