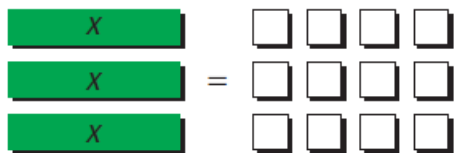/35 marks

Chapter 10 Assignment 1
Topics 10.1 and 10.2

1. Write the equation the model represents: *(4 marks)*
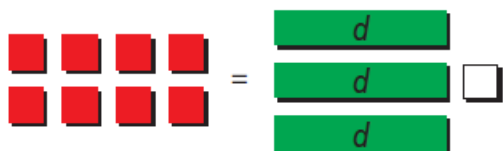
a)

_____

b)

_____
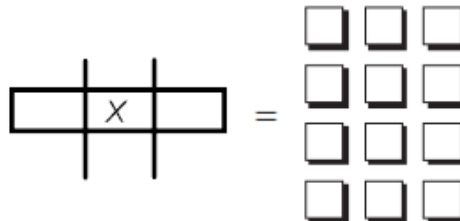
c)

_____

d)

_____
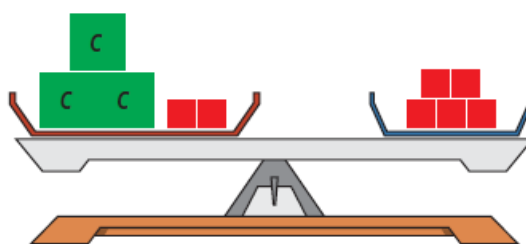
2. Model the following equations: *(2 marks)*

a) $\dfrac{x}{3} = -5$	b) $3 - 2x = 4$

3. **Show** that *m = -6* is or is not the solution: *(4 marks)*

a) $\dfrac{m}{-3} = 2$	b) $10 - 4m = -12$

4. **Solve** and **verify** for full marks:

a) **Solve:**   **Verify:**

   -48 = -4s

/3

b) **Solve:**   **Verify:**

$$16 = \frac{x}{-3}$$

/3

c) **Solve:**   **Verify:**

   4*h* + 3 = 19

/4

d) **Solve:**   **Verify:**

   184 = -8*j* + 88

/4

5. The Me-to-We club earned $624 at a recent fundraiser. They donated $114 to the local shelter. They took the remaining amount and donated it equally amongst three other charities. How much did each charity receive?

/5

6. Zoey has a collection of CDs and DVDs. The number of CDs she has is three fewer than four times the number of DVDs. Zoe has 25 CDs. How many DVDs does Zoey have?

/5

10 Solve Problems Using Logical Reasoning

GOAL

Solve problems that involve equations using logical reasoning.

Use logical reasoning to solve the following problems.

1. Sally's father is 45. He is 15 years older than twice Sally's age. How old is Sally?

2. Kathy is twice as old as Lisa. Three years from now, the sum of their ages will be 42. How old is Kathy?

At-Home | Help

When solving problems using logical reasoning, the following steps will help you:

1. **Understand the Problem**
   Search the question for information necessary to solve the problem.
2. **Make a Plan**
   Express the information in the form of an equation.
3. **Carry Out the Plan**
   Solve the equation.
4. **Look Back**
   Check your answer.

3. Each week, Ben deposits the same amount of money into his bank account. Today, he has $42 in his bank account. Three weeks from now, he will have $210. How much money does Ben deposit each week?

4. John and his family are planning a trip to Vancouver, British Columbia. They are choosing between three options. Trip A lasts for 5 days. Trip B lasts for 7 days. Trip C costs $2850 for 9 days. Trip C is twice the cost of Trip B, minus $1750. Trip B is twice the cost of Trip A, minus $200. How much does Trip A cost?