**Linear Equations Final Exam Review**

* **One – Step Equations ax = b; x = b**

**a**

1. Solve.

-8x = 64 -48 = 12y 8k = -32

1. Solve the equation. Verify the answer.

t = -48 48 = h

12 -40

1. The morning temperature is 1of the afternoon temperature. If the afternoon temperature

4

is -24ᵒC. What is the afternoon temperature?

1. The number of men who are left handed is 1 the number of men who are right – handed.

5

About 12% of men in a room are left – handed. Determine how many men in the room are right – handed.

* **Solving Two – Step Equations ax + b = c**

1. Solve each equation.

16x – 8 = 56 16p + 32 = 48

1. Solve. Verify your answer.

156 + 36g = 300

1. Sam is saving $950 to buy a sound system. If he doubles the amount he has saved he will have 25 more than he needs. The situation can be modelled by 2s – 25 = 850, where s represents the amount he saved so far?
2. A living room’s length is 2m less than three times its width. The room has a length of 6 m. Write and solve an equation to determine the width of the living room.

* **Solving Two – Step Equations x + b = c**

**a**

1. Solve.

-20 + g = 12 56 = 44 – x

-8 12

1. Solve then verify.

8 + m = 72

12

1. 60 = -20 + x

-24

1. The cost of a concert ticket for a student is $4 less than one quarter of the cost of an adult ticket. The cost of a student ticket is $8. Write and solve an equation to determine the cost of an adult ticket.
2. T is air temperature in ᵒC at an altitude “h” metres, and t is the ground temperature ᵒC.

T = t – h

150

If the ground temperature is 20 ᵒC what is the temperature at 6200 m? What is the altitude if the outside air temperature is – 30 ᵒC?

* **Solving Two Step Equations a(x + b) = c**

1. Solve.

12(t – 8) = 48 12(4 + g) = -300

1. Solve and verify.

16(m – 12) = 48

1. The side length of an equilateral triangle will be increased by 12 cm on each side. The perimeter of the new triangle is 1284 cm. Write and solve an equation to determine the length of the new side.

**Questions to Review**

Chapter 10 Get Ready

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10.1 Modelling and Solving One – Step Equations

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10.1 Modelling and Solving Two – Step Equations

Linear Equations Assignment 1

Linear Equations Quiz

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Linear Equations Assignment 2

Linear Equations Test