Linear equations topic test

Name: _____ Date: _____

15 questions | 36 marks | 45 minutes

A by-hand review of balancing, checks, one- and two-step equations and familiar models.

No calculator needed.

1. What does the equals sign in an equation tell you? [1 mark]

2. Complete $8 + 7 = \square + 9$. [1 mark]

3. Solve $x + 4 = 11$. State the operation used on both sides. [2 marks]

4. Check whether $x = 5$ solves $3x + 2 = 17$. [2 marks]

5. Solve $a + 9 = 26$. [2 marks]

6. Solve $n - 8 = 13$. [2 marks]

7. Solve $6p = 42$. [2 marks]

8. Solve $\frac{b}{4} = 9$. [2 marks]

9. Solve $3x + 5 = 26$ and check your answer. [3 marks]

10. Solve $5m - 4 = 31$. [3 marks]

11. Solve $\frac{n}{3} + 4 = 10$. [3 marks]

12. Solve $2(p + 3) = 22$. [3 marks]

13. Leah has c cards. She receives 7 more and now has 24. Write an equation and find how many cards she started with. [3 marks]

14. An activity centre charges 4 dollars for entry plus 3 dollars per ride. A visitor pays 25 dollars. Define a variable, form an equation and find the number of rides. [4 marks]

15. A student solves $4t + 6 = 30$ by writing $4t = 36$, then $t = 9$. Explain the error and give the correct solution. [3 marks]