**Balancing and Solving Equations**

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| **LITERACY**Write a sentence to explain what you understand for each of the keywords:1. Equation
2. Balanced
3. Inverse
 | **RESEARCH**Research the equals sign, when it was first used in maths and what was used beforehand. | **MEMORY**Ensure both sides of the equals sign are the same.Add and subtract are inverse operationsMultiply and divide are inverse operations |
| **SKILLS**1. Simplify these expressions.a) 5e x 4 b) 10 x 3r c) 2y x 11z d) 20p x 6re) 36e ÷ 6 f) 70j ÷ 7 g) 48w ÷ 12t h) 55a ÷ 11b2. Calculate the missing numbers in these equations:a) 30 = 27 + ☐ b) 25 = ☐ - 10 c) 20 x ☐ = 100d) 18 + 12 = 27 + ☐ e) 5 x 5 = ☐ - 10 f) 20 x ☐ = 80 + 20 g) 4 x 4 = ☐ - 43. Solve these equations, writing out using algebraic notationa) n + 17 = 20 b) p – 5 = 45 c) 10p = 30 d) $\frac{t}{4}=2$ | **STRETCH**1. Find the area of the rectangle: 3a 4b2. Solve these equations:a) v + 5 = 2 b) t – 20 = 0 c) 4f = 10 d) $\frac{m}{4}=-2$ |

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