**Balancing and Solving Equations**

|  |  |  |
| --- | --- | --- |
| **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 operations  Multiply 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 6r  e) 36e ÷ 6 f) 70j ÷ 7 g) 48w ÷ 12t h) 55a ÷ 11b  2. Calculate the missing numbers in these equations:  a) 30 = 27 + ☐ b) 25 = ☐ - 10 c) 20 x ☐ = 100  d) 18 + 12 = 27 + ☐ e) 5 x 5 = ☐ - 10  f) 20 x ☐ = 80 + 20 g) 4 x 4 = ☐ - 4  3. Solve these equations, writing out using algebraic notation a) n + 17 = 20 b) p – 5 = 45 c) 10p = 30 d) | | **STRETCH**  1. Find the area of the rectangle:  3a  4b  2. Solve these equations:  a) v + 5 = 2  b) t – 20 = 0  c) 4f = 10  d) |

**Balancing and Solving Equations**

|  |  |  |
| --- | --- | --- |
| **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 operations  Multiply 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 6r  e) 36e ÷ 6 f) 70j ÷ 7 g) 48w ÷ 12t h) 55a ÷ 11b  2. Calculate the missing numbers in these equations:  a) 30 = 27 + ☐ b) 25 = ☐ - 10 c) 20 x ☐ = 100  d) 18 + 12 = 27 + ☐ e) 5 x 5 = ☐ - 10  f) 20 x ☐ = 80 + 20 g) 4 x 4 = ☐ - 4  3. Solve these equations, writing out using algebraic notation a) n + 17 = 20 b) p – 5 = 45 c) 10p = 30 d) | | **STRETCH**  1. Find the area of the rectangle:  3a  4b  2. Solve these equations:  a) v + 5 = 2  b) t – 20 = 0  c) 4f = 10  d) |