5.

$$A = 2bx + 3by - 7 \quad \text{For } b$$

$$A + 7 = 2bx + 3by$$

$$A + 7 = b(2x + 3y)$$

$$\frac{A+7}{2x+3y} = \frac{b(2x+3y)}{2x+3y}$$

$$\boxed{\frac{A+7}{2x+3y} = b}$$

7.

$$S = \frac{1}{2}gt^2 + vt \quad \text{For } g$$

$$2s = 2\left(\frac{1}{2}gt^2\right) + 2vt$$

$$2s = gt^2 + 2vt$$

$$2s - 2vt = gt^2$$

$$\frac{2s - 2vt}{t^2} = \frac{gt^2}{t^2}$$

$$\boxed{\frac{2s - 2vt}{t^2} = g}$$

6.

$$\frac{x}{y} = \frac{3}{z} + \frac{9}{b} \quad \text{For } b$$

$$byz\left(\frac{x}{y}\right) = byz\left(\frac{3}{z}\right) + byz\left(\frac{9}{b}\right)$$

$$bxz = 3by + 9yz$$

$$bxz - 3by = 9yz$$

$$b(xz - 3y) = 9yz$$

$$\frac{b(xz - 3y)}{xz - 3y} = \frac{9yz}{xz - 3y}$$

$$\boxed{b = \frac{9yz}{xz - 3y}}$$