Rearranging simple formulas

6 questions | 13 marks

Equivalent correct methods earn the corresponding marks.

1. Make x the subject of $y = x + 8$. [2 marks]

Subtract 8 from both sides.

Answer: $x = y - 8$

2. Make p the subject of $C = 5p$. [2 marks]

Divide both sides by 5.

Answer: $p = \frac{C}{5}$

3. Make t the subject of $d = vt$, where $v \neq 0$. [2 marks]

Divide both sides by v.

Answer: $t = \frac{d}{v}$

4. Make n the subject of $T = 3n + 6$. [2 marks]

Subtract 6, then divide by 3.

Answer: $n = \frac{T - 6}{3}$

5. Make a the subject of $P = 2a + 2b$. [2 marks]

Subtract $2b$, then divide the full difference by 2.

Answer: $a = \frac{P - 2b}{2}$

6. A repair costs $C = 6h + 18$ dollars. Make h the subject and find h when $C = 54$. [3 marks]

Subtract 18 and divide by 6.

$\frac{54 - 18}{6} = 6$.

Answer: $h = \frac{C - 18}{6}$; 6 hours.