

Algebra - Rearranging Formulae

Q1

Make v the subject of the formula $t = \frac{v}{5} + 2$

$$v = \dots$$

(Total 2 marks)

Q2

Make k the subject of the formula $t = \frac{k}{k-2}$

$$\dots$$

(Total 4 marks)

Algebra - Rearranging Formulae

Q1

Make v the subject of the formula $t = \frac{v}{5} + 2$

$$t = \frac{v}{5} + 2 \quad (\text{Multiply equation by 5})$$

$$5t = v + 10$$

$$5t - 10 = v$$

$$v = 5t - 10$$

(Total 2 marks)

Q2

Make k the subject of the formula $t = \frac{k}{k-2}$

$$t = \frac{k}{k-2}$$

$$t(k-2) = k$$

$$tk - 2t = k$$

$$tk - k = 2t$$

$$k(t-1) = 2t$$

$$k = \frac{2t}{t-1}$$

Alternative answer

$$k = \frac{-2t}{1-t}$$

$$k = \frac{2t}{t-1} \\$$

(Total 4 marks)