

2.6 Answers

GCSE Mathematics Algebra, Rearranging Formulae

2.6.1 Solutions to Quick Questions 2.2

$$(i) \quad \frac{3}{8}$$

$$(ii) \quad \frac{x}{7}$$

$$(iii) \quad 7$$

$$(iv) \quad \frac{x}{13}$$

$$(v) \quad \frac{5}{x}$$

$$(vi) \quad \frac{2}{3x}$$

$$(vii) \quad \frac{11}{8e}$$

$$(viii) \quad \frac{3x}{w}$$

$$(ix) \quad \frac{4pw}{m}$$

$$(x) \quad \frac{1}{4}$$

$$(xi) \quad \frac{1}{x}$$

$$(xii) \quad \frac{1}{8m}$$

$$(xiii) \quad \frac{p+q}{4}$$

$$(xiv) \quad m^2 + n$$

$$(xv) \quad \frac{1}{a+b}$$

2.6.2 Solution to Example 2.3

$$\begin{array}{ccc}
 & \left| \frac{3}{5x} + 2m = p \right| & \\
 -2m & & -2m \\
 & \left| \frac{3}{5x} = p - 2m \right| & \\
 \updownarrow & & \updownarrow \\
 & \left| \frac{5x}{3} = \frac{1}{p-2m} \right| & \\
 \times 3 & & \times 3 \\
 & \left| 5x = \frac{3}{p-2m} \right| & \\
 / 5 & & / 5 \\
 & \left| x = \frac{3}{5(p-2m)} \right| &
 \end{array}$$

2.6.3 Solution to Exercise 2.4

Answer 1

$$x = \frac{1}{5ab + c}$$

Answer 2

$$x = \frac{7}{w - 2pq}$$

Answer 3

$$x = \frac{5k}{6 - z}$$

Answer 4

$$x = \frac{7m}{4zk} - 3p$$

Answer 5

$$x = \frac{2 + w}{k + 11}$$

Answer 6

$$x = \frac{1}{m^2 (2w + v)}$$

Answer 7

$$x = \frac{8}{7(2g - 5u)}$$