

Name:

Class/Set:

Making x the subject - x appears twice

Malvern College

1: Rearrange to make x the subject:

a) $y = \frac{1 + 2x}{5x}$

b) $y = \frac{10x + 9}{x - 1}$

c) $y = \frac{3x - 2}{5x - 4}$

d) $y = \frac{3}{x} - 2$

e) $y = \frac{2x - 6}{3x + 5}$

f) $y = \frac{x - 3}{x + 9}$

g) $y = \frac{1}{6 - 8x}$

h) $y = \frac{-10}{x - 5}$

i) $y = \frac{-7x + 9}{x - 1}$

2: Rearrange to make x the subject:

$$\text{a) } y = \frac{1 + 3x}{4x}$$

$$\text{b) } y = \frac{6}{x} + 5$$

$$\text{c) } y = \frac{9x - 6}{6x - 5}$$

$$\text{d) } y = \frac{10}{x - 7}$$

$$\text{e) } y = \frac{1}{3 + 9x}$$

$$\text{f) } y = \frac{2x + 10}{5x - 2}$$

$$\text{g) } y = \frac{x - 7}{x + 4}$$

$$\text{h) } y = \frac{-5x - 5}{5x - 3}$$

$$\text{i) } y = \frac{-2}{x} + 10$$

3: Rearrange to make x the subject:

$$\text{a) } y = \frac{-1 + 6x}{10x}$$

$$\text{b) } y = \frac{5}{x - 5}$$

$$\text{c) } y = \frac{3x - 9}{4x - 2}$$

$$\text{d) } y = \frac{1}{8 + 5x}$$

$$\text{e) } y = \frac{x + 8}{x - 6}$$

$$\text{f) } y = \frac{8x + 4}{x - 1}$$

$$\text{g) } y = \frac{-5}{x - 7}$$

$$\text{h) } y = \frac{4x - 10}{5x - 4}$$

$$\text{i) } y = \frac{-1 - 6x}{10x}$$

Answers: Making x the subject - x appears twice

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1: a) $x = \frac{1}{-2 + 5y}$ b) $x = \frac{y + 9}{y - 10}$ c) $x = \frac{4y - 2}{5y - 3}$ d) $x = \frac{3}{y + 2}$ e) $x = \frac{-5y - 6}{3y - 2}$
f) $x = \frac{-9y - 3}{y - 1}$ g) $x = \frac{-1 + 6y}{8y}$ h) $x = \frac{-10}{y} + 5$ i) $x = \frac{y + 9}{y + 7}$

2: a) $x = \frac{1}{-3 + 4y}$ b) $x = \frac{6}{y - 5}$ c) $x = \frac{5y - 6}{6y - 9}$ d) $x = \frac{10}{y} + 7$ e) $x = \frac{1 - 3y}{9y}$
f) $x = \frac{2y + 10}{5y - 2}$ g) $x = \frac{-4y - 7}{y - 1}$ h) $x = \frac{3y - 5}{5y + 5}$ i) $x = \frac{-2}{y - 10}$

3: a) $x = \frac{1}{6 - 10y}$ b) $x = \frac{5}{y} + 5$ c) $x = \frac{2y - 9}{4y - 3}$ d) $x = \frac{1 - 8y}{5y}$
e) $x = \frac{6y + 8}{y - 1}$ f) $x = \frac{y + 4}{y - 8}$ g) $x = \frac{-5}{y} + 7$ h) $x = \frac{4y - 10}{5y - 4}$
i) $x = \frac{1}{-6 - 10y}$