

Change the subject of a formula (part 1)

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Name: _____



Make y the subject of the formula:

a) $x = y + 5$

$$y = x - 5$$

e) $3y = 6x$

$$y = 2x$$

i) $x = \frac{y}{6}$

$$y = 6x$$

b) $y + 2 = x$

$$y = x - 2$$

f) $10x = 5y$

$$y = 2x$$

j) $\frac{y}{4} = x$

$$y = 4x$$

c) $y - 4 = 4x$

$$y = 4x + 4$$

g) $8x - 4 = 2y$

$$y = 4x - 2$$

k) $x + 5 = \frac{y}{3}$

$$y = 3x + 15$$

d) $y - x = 5$

$$y = 5 + x$$

h) $2y = 4 - 2x$

$$y = 2 - x$$

l) $\frac{y}{2x} = 5$

$$y = 10x$$

Make y the subject of the formula:

m) $x = 5y - 6$

$$y = \frac{x + 6}{5}$$

r) $4x = \frac{2y}{7}$

$$y = 14x$$

n) $2y - 9 = x$

$$y = \frac{x + 9}{2}$$

s) $x = \frac{2y}{9}$

$$y = \frac{9x}{2}$$

o) $3y + 9 = 3x$

$$y = x - 3$$

t) $\frac{y}{7} + 2 = x$

$$y = 7x - 14$$

p) $5y + 10 = 10x$

$$y = 2x - 2$$

u) $x = \frac{y+3}{5}$

$$y = 5x - 3$$

q) $8x = 2y - 4$

$$y = 4x + 2$$

v) $x = \frac{y-7}{3}$

$$y = 3x + 7$$

Exam style question:

P is the perimeter of the parallelogram

a) Show that $P = 8a + 2b$

$$P = 4a + b + 4a + b = 8a + 2b$$

b) Express a in terms of P and b

$$8a = P - 2b$$

$$a = \frac{P - 2b}{8}$$

