

# Fill in the Blanks

# Rearranging Formulae

Rearrange each formula to make  $x$  the subject.

Question	Collect all $x$ terms	Take out $x$ as a common factor	Divide by bracket
$ax = bx + c$	$ax - bx = c$	$x(a - b) = c$	$x = \frac{c}{a - b}$
$ax = c - bx$	$ax + bx = c$	$x(a + b) = c$	$x = \frac{c}{a + b}$
$ax - b = cx$	$ax - cx = b$	$x(a - c) = b$	$x = \frac{b}{a - c}$
$ax - b = cx - d$	$ax + cx = b - d$	$x(a + c) = b - d$	$x = \frac{b - d}{a + c}$
$ax + b = d - cx$	$ax + cx = d - b$	$x(a + c) = d - b$	$x = \frac{d - b}{a + c}$
$x - a = bx$	$x - bx = a$	$x(1 - b) = a$	$x = \frac{a}{1 - b}$
$ax - b = c + x$	$ax - x = c + b$	$x(a - 1) = c + b$	$x = \frac{c + b}{a - 1}$
$2 + ax = bx + c$	$ax - bx = c - 2$	$x(a - b) = c - 2$	$x = \frac{c - 2}{a - b}$
$2x - a = b + cx$	$2x - cx = b + a$	$x(2 - c) = b + a$	$x = \frac{b + a}{2 - c}$
$a^2x - 1 = c - bx$	$a^2x + bx = c + 1$	$x(a^2 + b) = c + 1$	$x = \frac{c + 1}{a^2 + b}$
$2ax - 1 = b + c^2x$	$2ax - c^2x = b + 1$	$x(2a - c^2) = b + 1$	$x = \frac{b + 1}{2a - c^2}$
$a - b^3x = 2 - cx$	$cx - b^3x = 2 - a$	$x(c - b^3) = 2 - a$	$x = \frac{2 - a}{c - b^3}$