

a Make a the subject of $s = ut + \frac{1}{2}at^2$ $a = \frac{2(s - ut)}{t^2}$ a fraction and a square in one term	b Make b the subject of $a = \sqrt{b^2 - c}$ $b = \sqrt{a^2 + c}$ square, then undo a square	c Make x the subject of $3(x + a) = b(x - 1)$ $x = \frac{3a + b}{b - 3}$ a bracket on each side	d Make x the subject of $y = \frac{2}{x + a} - 1$ $x = \frac{2}{y + 1} - a$ a bracket underneath
e Make x the subject of $\frac{x}{a} + \frac{x}{b} = 1$ $x = \frac{ab}{a + b}$ the subject twice in two fractions	f Make r the subject of $A = \pi(R^2 - r^2)$ $r = \sqrt{R^2 - \frac{A}{\pi}}$ a squared subject inside a bracket	g Make x the subject of $a(x - b)^2 = c$ $x = b \pm \sqrt{\frac{c}{a}}$ a square root gives two signs	h Make x the subject of $y = \frac{3 - 2x}{4 + x}$ $x = \frac{3 - 4y}{y + 2}$ a negative subject top and bottom
i Make x the subject of $\sqrt{x} + a = b\sqrt{x}$ for $a > 0, b > 1$ $x = \frac{a^2}{(b - 1)^2}$ a root as the subject twice	j Make x the subject of $x^2 + y^2 = (x + a)^2$ $x = \frac{y^2 - a^2}{2a}$ expanding: the x^2 terms cancel	k $A = \pi r^2$ and $C = 2\pi r$. Write A in terms of C . $A = \frac{C^2}{4\pi}$ eliminating a letter	l Make x the subject of $y = \sqrt{x^2 + 9} - x$ $x = \frac{9 - y^2}{2y}$ isolate the root, then square

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