10.4 Modelling & Solving Two-Step Equations: a(x+b)=c

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To solve an equation with brackets, multiply the terms in the brackets by the # on the outside

ex

$4(x+8) = 36$

$4x + 32 = 36$

$-32 \quad -32$

$\frac{4x}{4} = \frac{4}{4}$

$x = 1$

Ex #1

a) $-4(x-7) = 16$

$-4x + 28 = 16$

$-28 \quad -28$

$\frac{-4x}{-4} = \frac{-12}{-4}$

$x = 3$

b) $-20 = 5(3+p)$

$-20 = 15 + 5p$

$-15 \quad -15$

$\frac{-35}{5} = \frac{5p}{5}$

$-7 = p$

c) $-2(x-3) = 12$

$-2x + 6 = 12$

$-6 \quad -6$

$\frac{-2x}{-2} = \frac{6}{-2}$

$x = -3$

d) $18 = -6(x+2)$

$18 = -6x - 12$

$+12 \quad +12$

$\frac{30}{-6} = \frac{-6x}{-6}$

$-5 = x$

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