

## Brackets – Simplifying and Equations with brackets

Question 1 Multiply out the brackets and simplify, showing all lines of working.

a)  $2y(3y + 1)$    b)  $4x(3x - 7)$    c)  $-2w(7 + 3w)$    d)  $-4p(6p - 2 + k)$

e)  $8(3e - 2) + 5$    f)  $9(4h + 7) - 60$    g)  $4(w + 1) - 4w$

h)  $5(3m - 2) + 3(2m - 6)$    i)  $4(3p - 4) - 3(4p - 5)$

j)  $5u(2u + 3) - 2u(u - 7)$    k)  $6m - 2(4 + 3m)$

l)  $3h - 5(2h - 1) + 6h$    m)  $r - (r - 1) + (-1)$

Question 2 Solve the following equations, showing all lines of working.

a)  $6x + 4 = 3x + 4$    b)  $9x - 1 = 4x + 34$    c)  $7x - 8 = x + 1$

d)  $7x - 48 = x$    e)  $3x + 17 = x$    f)  $10x - 30 = 6x$

g)  $5(x - 7) = 0$    h)  $3(x - 8) = 9$    i)  $5(x + 7) = 20$

j)  $6(2x - 1) = 10x$    k)  $14(2x - 1) = 26x + 4$    l)  $8(x + 3) = 7x$

m)  $5(2x + 1) - 2(x - 2) = 6x + 13$    n)  $10(x + 3) - 6(x + 1) = 2x + 40$

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