Brackets & Factorising

1. Remove the brackets:

 (a) 2(*x* + 5) (b) *a*(*a* + 4*b*) (c) 2*x*(3*x* – 5*y*)

2. Simplify the following:

 (a) 4 + 2(2*p* – 3*q*) (b) 2*ab* + 4*a*(3*a* – 2*b*) (c) 5*x* – (*x* + 3*y*)

3. Multiply out the brackets:

 (a) (*x* + 3)(*x* + 2) (b) (2*y* – 3)(*y* + 4) (c) (a – 3)( $a^{2}+4a-1$)

4. Factorise the following completely:

 (a) 6*a* + 3*b* (b) 12*f* + 4*g*

 (c) 2*p* – 8*p*2 (d) *c*2 – *d*2

 (e) 4*x*2 – 25 (f) 8*k*2 – 18*m*2

 (g) *a*2 + 3*a* + 2 (h) *w*2 + 3*w* – 10

 (i) *y*2 – 10*y* + 16 (j) 2*t*2 + 12*t* – 32

 (k) 3*p*2 + 8*p* – 3



5.

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