**FACTORISATION**

1. Factorise each of the following algebraic expressions completely

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| 3*x* + 6*y*  = 3(*x* + 2*y*) | a) 2*m* – 6*n* |
| b) *ab* + *ac* | c) 7*p* – 21*q* |
| d) *mn* – 2*m* | e) 2*a* + 6 |
| f) 2*x* – 8*xy* | g) 3*mn* – 12*m* |
| h) 4*ab* + 6*b* | i) 6*pq* – 20*q* |
| j) *x*2*y* + *xy*2 | k) 4*y*2 – 14*y* |
| l) 2*p*2 + 4*pq* | m) 6*mn* – 10*m*2*n*2 |
| n) 3*a*2 + 2*ab* | o) *xy* – 3*xy*2 |

1. Factorise each of the following algebraic expressions completely

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| *x*2 – 25  = *x*2 – 52  = (*x* – 5) (*x* + 5) | a) *y*2 - 4 |
| b) *a*2 – 81 | c) *x*2 – 36 |
| d) *m*2 – 64 | e) *x*2 – *y*2 |
| f) 3*y*2 – 48 | g) 9*m*2 – 4 |
| h) 2*m*2 – 72 | i) 25*a*2 – 36*b*2 |
| j) 16*a*2 – *b*2 | k) 3*x*2 – 3*y*2 |

1. Factorise each of the following algebraic expressions completely

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| *x*2 + 2*xy* + *y*2  = *x*2 + 2(*xy*) + *y*2  = (*x* + *y*) (*x* + *y*)  = (*x* + *y*)2 | a) *x*2 – 2*xy* + *y*2 |
| b) *x*2 + 6*x* + 9 | c) *x*2 + 12*x* + 36 |
| d) *y*2 + 8*y* + 16 | e) *k*2 - 14*k* + 49 |
| f) *x*2 - 4*x* + 4 | g) 4*x*2 + 20*x* + 25 |
| h) 9*y*2 – 24*y* + 16 | i) 9*y*2 - 12*y* + 4 |
| j) 9*y*2 - 6*y* + 1 | k) 4*x*2 + 4*x* + 1 |

1. Factorise each of the following algebraic expressions completely

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| --- | --- |
| *x*2 + 2*x* - 3  = (*x* - 1) (*x* + 3) | a) *y*2 - 7*y* + 10 |
| b) *x*2 + 8*x* + 12 | c) *x*2 - 4*x* – 5 |
| d) 2*x*2 + 7*x* + 6 | e) 3*y*2 – *y* – 2 |
| f) *a*2 – 2*a* – 8 | g) *y*2 – 7*y* + 12 |
| h) 2*y*2 – 9*y* + 7 | i) 3*x*2 + 14*x* + 8 |
| j) 2*y*2 – *y* – 6 | k) *x*2 – 9*x* + 8 |