Factorising Single Brackets GREEN

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| **Question** | **Working** | **Answer** |
| 3x +12 |  |  |
| 4x - 10 |  |  |
| 15x - 5 |  |  |
| 14 - 56x |  |  |
| 18 - 54x |  |  |
| x² + 5x |  |  |
| x² - 7x  |  |  |
| 3x² - 6x |  |  |
| xy + x² |  |  |
| 3xy + 6y² |  |  |
| 14x + 70 |  |  |
| 21 - 63x |  |  |
| 15x³ + 80x |  |  |

Factorising Single Brackets AMBER

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| **Question** | **Answer** |
| 3x +12 | 5(3x - 1) |
| 4x - 10 | x(x + 5) |
| 15x - 5 | 3(x + 4) |
| 14 - 56x | x(x - 7) |
| 18 - 54x | 2(2x - 5) |
| x² + 5x | 14(1 - 4x) |
| x² - 7x | 3x(x - 2) |
| 3x² - 6x | 3y(x + 2y) |
| xy + x² | 18(1 - 3x) |
| 3xy + 6y² | 5x(3x² + 16) |
| 14x + 70 | 21(1 - 3x) |
| 21 - 63x | 14(x + 5) |
| 15x³ + 80x | x(y + x) |

Factorising Single Brackets RED

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| **Question** | **Working** | Answer |
| 3x +12 | Both in 3 times table so take out a factor of 3 | 3(x + 4) |
| 4x - 10 | Both in 2 times table so take out a factor of 2 | 2( - ) |
| 15x - 5 | Both in 5 times table so… |  ( - ) |
| 14 - 56x |  |  |
| 18 - 54x |  |  |
| x² + 5x | These both have an x in so must both be in the x times table | x( + ) |
| x² - 7x  |  |  |
| 3x² - 6x | These both have a 3 and an x as a factor  | 3x( - ) |
| xy + x² |  |  |
| 3xy + 6y² |  |  |
| 14x + 70 |  |  |
| 21 - 63x |  |  |
| 15x³ + 80x |  | 5x( + ) |