

- |    |     |                    |   |                     |
|----|-----|--------------------|---|---------------------|
| 1. | (a) | $5x(x - 3) = 0$    | 1 |                     |
|    |     | roots 0, 3         | 1 |                     |
|    | (b) | $(2x - 3)(3x + 1)$ | 1 | <i>each bracket</i> |
|    |     | Roots $3/2, -1/3$  | 1 |                     |

**[5 marks]**

- |    |                                     |   |
|----|-------------------------------------|---|
| 2. | substituting into quadratic formula | 1 |
|    | discriminant = 69                   | 1 |
|    | first solution $1.88$               | 1 |
|    | second solution $-0.88$             | 1 |

**[4 marks]**

- |    |                                     |   |
|----|-------------------------------------|---|
| 3. | $4x^2 - 8x - 7$                     | 1 |
|    | substituting into quadratic formula | 1 |
|    | discriminant = 176                  | 1 |
|    | first solution $2.7$                | 1 |
|    | second solution $-0.7$              | 1 |

**[5 marks]**