

One point questions	Two point questions
Simplify the following:  e.g. $6p - 2p + 5p - 7p = 11p - 9p = \underline{2p}$	Multiply out the following:  e.g. $4(3x + 5) = \underline{12x + 20}$  e.g. $x(4x - 7) = \underline{4x^2 - 7x}$
1. $c + 2c + 3c$  2. $6d - d$  3. $7g - 2g - 3g$  4. $5i - 7i + 3i$  5. $6k^2 + 4k^2$	1. $3(2x + 5)$  2. $6(3x - 2)$  3. $5(2x + 3y)$  4. $x(3x - 4)$  5. $y(5y + 4)$
6. $3r + 2s + 5r + 7s$  7. $7t + 3u + 2t + 4u$  8. $6x + 5y - 2x + 3y$  9. $5x + 3y - 4x + 7y$  10. $7x - 3y + 3x - 5y$	<div style="background-color: #f0e6e6; padding: 10px; margin-bottom: 10px;">           e.g. <math>5(2x + 4) + 3(2x - 5)</math>  <math>= 10x + 20 + 6x - 15</math>  <math>= \underline{16x + 5}</math> </div> 6. $4(2x + 5) + 3(5x + 4)$  7. $4(3x + 7) + 3(5x - 2)$

Two point questions	Three point questions
<p>Evaluate the following:</p> <p>e.g. If <math>m = 6</math>, then</p> $4m - 5 = 4 \times 6 - 5 = 24 - 5 = \underline{19}$ <p>...for all these let <math>x = 4</math>...</p>	<p>e.g. If <math>x = 2</math> and <math>y = -3</math>, then</p> $5x - 4y = 5 \times 2 - 4 \times (-3)$ $= 10 + 12$ $= \underline{22}$ <p>for all these let <math>x = 3</math> and <math>y = -2</math></p>
<p>1. <math>6x + 3</math></p> <p>2. <math>7x - 1</math></p> <p>3. <math>10 - 2x</math></p> <p>4. <math>x^2 + 10</math></p>	<p>1. <math>4x + 3y</math></p> <p>2. <math>2x - 3y</math></p> <p>3. <math>x^2 + y^2</math></p> <p>4. <math>(x + y)^2</math></p>
<p>e.g. If <math>p = -4</math>, then</p> $p^2 = (-4)^2 = (-4) \times (-4) = 16$ <p>... let <math>x = -2</math>...</p>	<p><b>Factorise these:</b></p> <p>e.g.1 <math>4x - 12 = \underline{4(x - 3)}</math></p> <p>e.g.2 <math>x^2 + 4xy = \underline{x(x + 4y)}</math></p>
<p>5. <math>2x + 10</math></p> <p>6. <math>x^2 + 5</math></p> <p>7. <math>3x^2</math></p>	<p>1. <math>4x - 20</math></p> <p>2. <math>6x + 8</math></p> <p>3. <math>x^2 + 8xy</math></p>

**Answers****One-point Questions [10]**

- |              |              |              |              |                |
|--------------|--------------|--------------|--------------|----------------|
| 1. $6c$      | 2. $5d$      | 3. $2g$      | 4. $l$       | 5. $10k^2$     |
| 6. $8r + 9s$ | 7. $9t + 7u$ | 8. $4x + 8y$ | 9. $x + 10y$ | 10. $10x - 8y$ |

**Two-point Questions [14 + 14]**

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|---------------|---------------|----------------|----------------|----------------|
| 1. $6x + 15$  | 2. $18x - 12$ | 3. $10x + 15y$ | 4. $3x^2 - 4x$ | 5. $5y^2 + 4y$ |
| 6. $23x + 32$ | 7. $27x + 22$ |                |                |                |
| 1. $27$       | 2. $27$       | 3. $2$         | 4. $26$        | 5. $6$         |
| 6. $6$        | 7. $12$       |                |                |                |

**Three-point Questions [21]**

- |                |                |         |        |               |
|----------------|----------------|---------|--------|---------------|
| 1. $6$         | 2. $0$         | 3. $13$ | 4. $1$ | 5. $4(x - 5)$ |
| 6. $2(3x + 4)$ | 7. $x(x + 8y)$ |         |        |               |

**Total points = 59****Additional guidance:**

Two-point questions - assign 1 mark for either term correct

(e.g. (1) as  $6x + 8$  or  $5x + 15$ )

Three-point questions - assign 1 mark for the correct working numbers seen

(e.g. (1) as  $12 + -6 \dots = 18$ )

Three-point questions - assign 1 mark for the correct common factor and one correct term inside the brackets, or, a correct alternative

(e.g.  $4x - 20 = 2(2x - 10)$ )