| | | | | | | |
|---|---|---|---|---|---|---|
| **7** | (a) | | $g^7$ | 1 | B1 | |
| | (b) | | $5k^5 + 20k^2$ | 2 | B2 | for $5k^5 + 20k^2$ |
| | | | | | (B1 | for $5k^5$ or $20k^2$) |
| | (c) (i) | $(x \pm 7)(x \pm 9)$ | | 2 | M1 | for $(x \pm 7)(x \pm 9)$<br>**or** for $(x + a)(x + b)$ where $ab = -63$ **or** $a + b = -2$ where $a$ and $b$ are integers |
| | | *Correct answer scores full marks (unless from obvious incorrect working)* | $(x + 7)(x - 9)$ | | A1 | for correct factors |
| | (ii) | | $-7, 9$ | 1 | B1 | must ft from (c)(i) dep on factorising in the form $(x + p)(x + q)$ where $p$ and $q$ are integers |
| | (d) | $-2y - 3y < -12 - 7$ **or** $7 + 12 < 3y + 2y$<br>**or** $7 < 5y - 12$ **or** $7 - 5y < -12$<br>**or** $-2y < 3y - 19$ **or** $19 - 2y < 3y$ | | 3 | M1 | for rearrangement with $y$ terms on one side and numerical terms on the other in a correct inequality **or** the correct simplification of $y$ terms or numbers on one side in a correct inequality<br>sign can be = or the incorrect inequality sign |
| | | $-5y < -19$ **or** $19 < 5y$<br>**or** $-y < \frac{-19}{5}$ **or** $y < \frac{19}{5}$<br>**or** $y = \frac{19}{5}$ oe | | | M1 | for the correct simplification of $y$ terms on one side and numbers on the other side in a correct inequality **or** a correct inequality with the wrong sign<br>sign can be = or the incorrect inequality sign |
| | | *Correct answer scores full marks (unless from obvious incorrect working)* | $y > \frac{19}{5}$ | | A1 | oe eg $y > 3.8$ or $3.8 < y$<br>Must be given as the correct inequality on the answer line |
| | | | | | | **Total 9 marks** |