Algebra: Quadratics, Rearranging Formulae and Identities Calculator 10 minute test 3

| Q | Answer | Mark | Comments | | | |
|-------|---|------|---|--|--|--|
| | | | | | | |
| 1 | Chooses both of (c) a^6 and (d) $(a^3)^2$ and no incorrect statements. | B2 | B1 Chooses one of (c) a^6 or (d) $(a^3)^2$ OR | | | |
| | | | Chooses both of (c) a^6 and (d) $(a^3)^2$ and one incorrect statement. | | | |
| | | | | | | |
| 2 | 4x(x-25) | B2 | Factorises fully. | | | |
| | | | B1 for factorising partially e.g. $4(x^2 - 25x)$ or $x(4x - 100)$ | | | |
| | | | | | | |
| 3 | $a-b=\frac{c}{2}$ | M1 | Attempts to isolate the <i>c</i> term. | | | |
| | 2(a-b) = c | A1 | o.e. $2a - 2b = c$ | | | |
| | | | | | | |
| 3 alt | 2a = 2b + c | M1 | Multiplies through to remove the fraction. All terms must be correct. | | | |
| | 2a-2b=c | A1 | o.e.2(a - b) = c | | | |

| 4 | Square | B1 | Or uses ² notation |
|---|--------|----|-------------------------------|
| | × 2 | B1 | Or uses words |

| 5 | $3.6^2 \times 3.14 \times 20$ | M1 | Attempt to expand the brackets with at least four terms. |
|---|-------------------------------|------|---|
| | = 813.888 | A1 | Allow 813.888 for A1 Allow use of π button on calculator (as question misread) but not leaving in terms of π . |
| | 814 | B1ft | ft their value correctly rounded to 3sf |