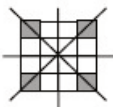


| Question | Answer | Marks | AO Element | Notes | Guidance |
|----------|---|-------|------------|--|----------|
| 1(a) | 2 | 1 | | | |
| 1(b) | 2 correct lines and no extras | 2 | | B1 for 1 correct line and no extras or for 2 correct lines and one extra | |
| 2 | Correct lines drawn | 2 | | B1 for one correct with no incorrect lines | |
| 3 | 2 | 1 | | | |
| 4 | 4 | 1 | | | |
| 5 | 1 correct line of symmetry | 1 | | | |
| 6 |  | 2 | | B1 for 2 or 3 correct lines drawn or for 4 correct lines and one wrong extra line | |
| 7 | 2 correct lines | 2 | | B1 for each | |
| 8 | 2 | 1 | | | |
| 9 | 2 | 1 | | | |
| 10(a) | Hexagon | 1 | | | |

| Question | Answer | Marks | AO Element | Notes | Guidance |
|----------|--|----------|------------|--------------------|----------|
| 10(b) | 6 | 1 | | | |
| 11(a) | 4 | 1 | | | |
| 11(b) | 4 | 1 | | | |
| 12 | [$u =$] 20 [$v =$] 52 [$w =$] 108 [$x =$] 36 | 4 | | B1 for each | |
| 13(a) | 68 Alternate [angles] | 2 | | B1 for each | |
| 13(b) | 22 Angle [between] tangent [and] radius [=] 90° | 2 | | B1 for each | |
| 13(c) | 68 with two correct reasons Angle [in a] semicircle [=] 90° Angles [in a] triangle add to 180° | 3 | | B1 for each | |

| Question | Answer | Marks | AO Element | Notes | Guidance |
|----------|---|----------|------------|---|----------|
| 14 | <p>B1 for $PQR = 90$ angle in semi-circle</p> <p>B1 for $PRQ = 61$ angle sum of triangle [= 180]</p> <p>B1 for $PSQ = 61$ angle in same segment</p> | 3 | | <p>If 0 scored SC1 for $PSQ = PRQ$ [= 61] soi</p> | |
| 15 | 57 | 4 | | <p>B1 for $ABT = 98$</p> <p>B1 for TAB or $ATB = 41$</p> <p>B1 for $BTC = 41$ or $TBC = 82$ or $ATC = 82$ soi</p> | |
| 16(a) | 90 90 | 2 | | B1 for each | |
| 16(b) | <p>M1 for correctly eliminating one variable</p> <p>A1 for $[x =] 7$</p> <p>A1 for $[y =] 9$</p> | 3 | | <p>M1FT <i>their</i> two linear equations</p> <p>If M0 scored, SC1 for 2 values satisfying one of <i>their</i> original equations</p> <p>If no working shown, SC1 for two correct answers given</p> | |
| 17 | 38 | 2 | | B1 for $AOB = 76$ | |

| Question | Answer | Marks | AO Element | Notes | Guidance |
|----------|---|-------|------------|--|----------|
| 18 | 68 | 2 | | B1 for $RSP = 68$ or $RQP = 112$ | |
| 19 | 80 | 2 | | B1 for angle $PQT = 50$ | |
| 20(a) | Angle [in a] semicircle | 1 | | | |
| 20(b) | 30 | 2 | | M1 for $\frac{60 \times 10}{2}$ | |
| 20(c) | 11.7 or 11.66... | 2 | | M1 for $[x^2 =]6^2 + 10^2$ or better | |
| 21 | B1 for angle [in a] semicircle is 90 B1 for allied, co-interior [add to 180] or angles in triangle [= 180] and alternate oe B1 for 32 | 3 | | Do not accept triangle for angle | |
| 22 | $[x =] 55$ $[y =] 24$ | 2 | | B1 for each | |
| 23(a) | 49 | 1 | | | |
| 23(b) | 98 | 1 | | FT 2 \times <i>their</i> (a) | |

| Question | Answer | Marks | AO Element | Notes | Guidance |
|----------|--------|-------|------------|--|-------------|
| 23(c) | 20 | 1 | | | |
| 23(d) | 70 | 1 | | FT 90 – <i>their</i> (c) | |
| 24 | 72 | 2 | | B1 for either angle at <i>J</i> or <i>H</i> = 108 or angle at <i>F</i> = 72 | |
| 25 | 85 | 2 | | B1 for either angle in alt segment = 58 | |
| 26 | 45 | 2 | | B1 for angles at <i>M</i> or <i>K</i> = 45 or angle at <i>L</i> = 90 | |
| | | | | | [Total: 67] |