| Q | Marking instructions | AO | Mark | Typical solution |
|---|---|---|---|---|
| 5 | Uses appropriate method to find radius eg complete the square by using $3^2$ or $4^2$ on LHS or RHS **PI** by correct radius 17 or 289 | 3.1a | M1 | $(x-3)^2 - 9 + (y-4)^2 - 16 = 264$ $(x-3)^2 + (y-4)^2 = 289$ $\frac{1}{2} \times 17^2 \times 0.9 = 130.05$ $\frac{1}{2} \times 17^2 \sin 0.9 = 113.19$ Area of segment = 16.9 |
| | Deduces correct radius or radius squared or fully correct completed square form seen | 2.2a | A1 | |
| | Uses appropriate method to find area of sector using radius 17 or their stated value of radius or value of radius clearly shown on diagram | 1.1a | M1 | |
| | Uses appropriate method to find area of triangle using radius 17 or their stated radius | 1.1a | M1 | |
| | Obtains area correct to at least 3 significant figures **AWRT** 16.9 | 1.1b | A1 | |
| | **Total** | | **5** | |