Topic Test 1 Mark Scheme
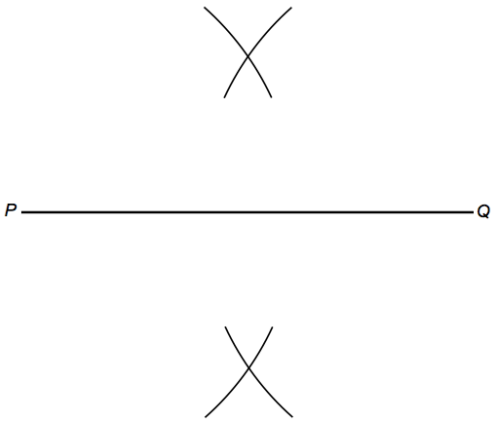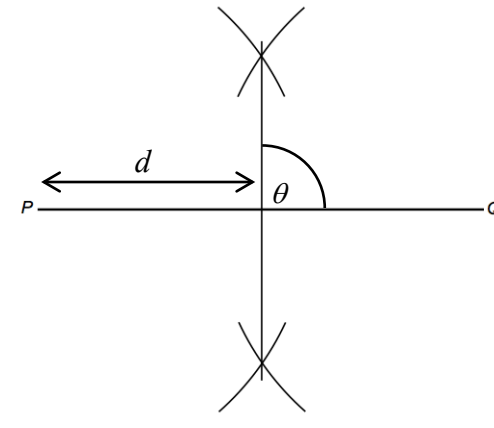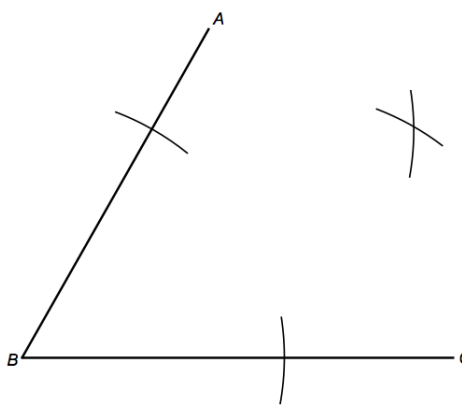## Constructions and loci - Foundation

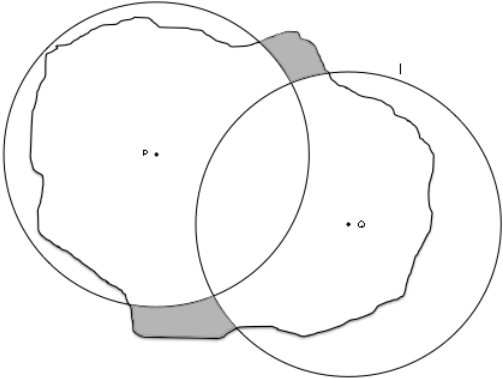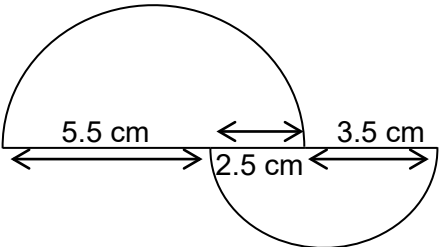| Q	Answer	Mark	Comments
1(a)	7	B1	
1(b)	50	B1	
1(c)	[53, 55]	B1	

Q	Answer	Mark	Comments
2(a)	Intersecting arcs from both *A* and *B* of length 9 cm, with intersection joined to both *A* and *B*	B1	
2(b)	[7.75, 7.85]	B1	

Q	Answer	Mark	Comments
3	Three circles centred on *C* with radii [2.9, 3.1], [3.9, 4.1] and [5.9, 6.1]	B2	B1 for two circles drawn accurately

Q	Answer	Mark	Comments
4(a)	Any line perpendicular to *LM*	B1	
4(b)	Any line parallel to and twice the length of *LM*	B1	

Q	Answer	Mark	Comments
	Arcs of equal length centred on *P* and *Q* that intersect on either side of *PQ*	M1	
5	Perpendicular bisector within tolerance, θ = [89°, 91°], d = [4.9cm, 5.1 cm]	A1	

Q	Answer	Mark	Comments
6	Arcs on each ray of equal length centred on *B*, and intersecting arcs of equal length centred on these arcs. 	M1	
	Angle bisector within tolerance, $\theta = [29°, 31°]$ 	A1	

7(a)	A	B1	
7(b)	(FORWARD 6 cm TURN RIGHT) FORWARD 4 cm TURN RIGHT FORWARD 6 cm TURN RIGHT FORWARD 4 cm	B2	B1 if all turns are RIGHT B1 if distances alternate 4, 6, 4

Q	Answer	Mark	Comments
8		B2	B1 for a circle drawn with radius 6 cm from P or Q. B1 for two circles of equal radii drawn from P and Q and areas of no mobile phone coverage marked.

Q	Answer	Mark	Comments
9	5.5 cm 3.5 cm 2.5 cm	B2	B1 both semicircles drawn accurately