



Q	Answer	Marks
1	$PQ = PR = QR = 5$ cm, so triangle PQR is equilateral and each angle is 60 degrees	2
2	$3 + 4 = 7$, which is less than 8, so the two shorter sides cannot reach each other	2
3	Draw a 9 cm base AB. Arc of radius 6 cm from A. Arc of radius 8 cm from B. Where the arcs cross is C. Join AC and BC.	3
4	Arc from P crossing the line at Q. Same radius from Q crossing the first arc at R. Join P to R.	3
5	Arcs of equal radius (more than 4 cm) drawn from A and from B, crossing above and below AB; the straight line through the two crossing points is the perpendicular bisector, cutting AB at its midpoint at 90 degrees	2
6	Triangle ABC with $AB = 7$ squares, an arc of radius 6 squares from A and an arc of radius 5 squares from B crossing at C, arcs left showing	3
7	60 degree angle at P with both arcs of equal radius shown	3
8	Construct 60 degrees at P, then bisect it using compasses	3
9	The angle opposite the 9 cm side	2
10	An arc from B crossing BA and BC, then equal arcs from those two crossing points meeting inside the angle; the line from B through that meeting point bisects the angle into two 35 degree angles	2
11	Construct a 90 degree angle at P using the perpendicular at a point method, then bisect it	3
12	An arc from P crossing the line at two points, then arcs of equal radius from those two points crossing below the line; the line from P through that crossing point is perpendicular to the original line	2
13	Equal arcs from M crossing the line either side at X and Y, then larger equal arcs from X and Y crossing above the line; the line through M and that crossing point is perpendicular to the original line at M	2
14	Draw $AB = 7$ cm; arcs of radius 5 cm from A and from B cross at C; joining AC and BC gives the required isosceles triangle	2

Full worked solutions, written out by hand, are on the solutions sheet for this topic.