



Q	Answer	Marks
1	A and C	1
2	SAS	1
3	a) SAS b) ASA c) Not necessarily congruent (AAA is not a condition) d) RHS	4
4	Triangle ABC is congruent to triangle ADC by SSS	3
5	Triangle ABD is congruent to triangle ACD by SAS	3
6	a) SSS: $AB = AC$, $BM = CM$, AM common b) corresponding angles of congruent triangles are equal	4
7	Triangle ABD is congruent to triangle CDB by ASA	3
8	Triangle OMP is congruent to triangle ONP by RHS	3
9	Triangles OAM and OBM are congruent (SSS), so angle AOM = angle BOM and OM bisects angle AOB	3
10	Triangles PMX and PMY are congruent (SAS), so $PX = PY$	3
11	a) $OA = OC$ (radii), $OB = OD$ (radii), $AB = CD$ (given), so triangle OAB is congruent to triangle OCD (SSS) b) Angle AOB and angle COD are corresponding angles in congruent triangles, so they are equal	4
12	a) $AB = CD$ (given), angle ABD = angle CDB (alternate angles, AB parallel to DC), BD common, so triangle ABD is congruent to triangle CDB (SAS) b) AD corresponds to CB in the congruent triangles, so $AD = CB$	4
13	Triangles ABM and CDM are congruent (ASA), so $AM = CM$ and $BM = DM$, which means M is the midpoint of both diagonals	5

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