

Corresponding sides and angles

1 $QR = TU, PQ = ST, PR = SU$

2 $\angle DEC = \angle MNL$, $\angle CDE = \angle LMN$, $\angle DCE = \angle MLN$

3 $HI = MN, GH = LM, GI = LN$

4 $TU = BC, ST = AB, SU = AC$

5 $\angle PQR = \angle ABC$, $\angle RPQ = \angle CAB$, $\angle PRQ = \angle ACB$

6 **a** $ST = PQ, TU = QR, SU = PR$

b $\angle STU = \angle PQR$, $\angle TUS = \angle QRP$, $\angle UST = \angle RPQ$

7 a $BC = EF, AC = DF, AB = DE$

b $\angle BCA = \angle EFD$, $\angle BAC = \angle EDF$, $\angle ABC = \angle DEF$

8

a $\angle OPQ$

b $\angle PQO$

9

a $\angle EFD$ b $\angle DEF$

10

a $\triangle BDE$

b i $\angle BED$ ii $\angle EBD$

c i DE ii DB

Unknown sides and angles

11 **a** $x = 32^\circ$ **b** $x = 7$ **c** $y = 46^\circ$ **d** $y = 6$

12 $NM = 4$

13 $SU = 6$

14 $\angle DEF = 57^\circ$

15 $\angle NLM = 25^\circ$

16 $SU = 9$

17 $x = 79^\circ$

18 $y = 42^\circ$

19 $m = 7$

20
a SSS

b $q = 67^\circ$

21
a SAS

b $p = 37^\circ$

22
a AAS

b $x = 147^\circ$

23
a AAS

b $y = 2$