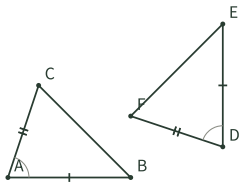
Congruence: correspondence, SSS and SAS

Year 8, upper volume • text pp. 13–18 • foundation lessons 7–9 • 1/2

Name: _____ Class: _____ Date: _____

Worked example 1

AB=DE, AC=DF and ∠BAC=∠EDF. Prove △ABC≅△DEF, explaining why SAS applies.

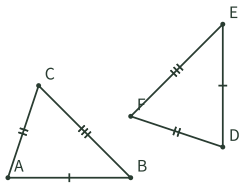


Geometry diagram; not drawn to scale except for construction tasks.

Guided attempt 2

The marked side pairs are equal. Complete an SSS proof in the order A↔D, B↔E, C↔F.

1. AB=___, AC=___, BC=___.
2. Therefore △ABC≅△___ by ___.

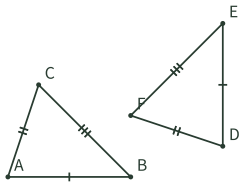


Geometry diagram; not drawn to scale except for construction tasks.

Prerequisite 3

Given △ABC≅△DEF, which side corresponds to BC?

A. DF
B. AB
C. EF
D. DE

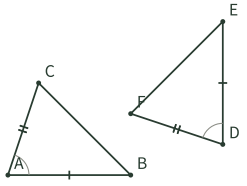


Geometry diagram; not drawn to scale except for construction tasks.

Prerequisite 4

Which angle is between AB and AC?

A. ∠ABC
B. ∠ACB
C. Every angle is included.
D. ∠BAC



Geometry diagram; not drawn to scale except for construction tasks.

Congruence: correspondence, SSS and SAS

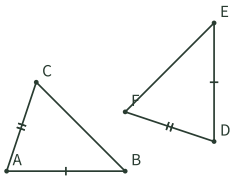
Year 8, upper volume • text pp. 13–18 • foundation lessons 7–9 • 2/2

Name: _____ Class: _____ Date: _____

Independent practice 5

AB=DE and AC=DF. Which additional equality completes an SSS test?

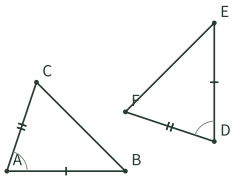
A. BC=EF
B. ∠A=∠D
C. AB=AB
D. BC=DE



Independent practice 6

AB=DE, AC=DF and ∠BAC=∠EDF. Which criterion uses exactly these facts directly?

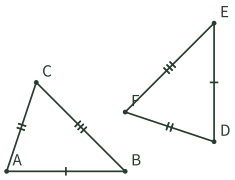
A. SSA
B. SAS
C. SSS
D. AAA



Independent practice 7

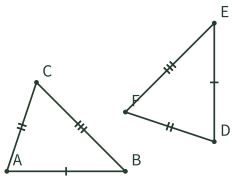
Given △ABC≅△DEF, which angle corresponds to ∠ACB?

A. ∠EDF
B. ∠ABC
C. ∠DFE
D. ∠DEF



Independent practice 8

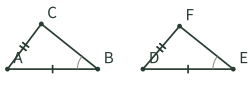
Use only the three marked equal side pairs to prove the rotated triangles congruent. Write the vertex order.



Exit question 9

AB=DE, AC=DF and ∠ABC=∠DEF. Is this automatically SAS?

A. No: the given angle is not between the two given sides.
B. Yes: any equal angle works.
C. Yes: two sides always determine a triangle.
D. It is SSS.



Exit question 10

The three corresponding angles are equal. Must the triangles have equal side lengths?

A. Yes, if they are rotated.
B. No: one triangle may be an enlargement of the other.
C. Yes, by AAA congruence.
D. Only the drawing colour matters.

