Question 1

The shape below is shown after it has been rotated a quarter turn clockwise.

What did the shape look like before it was rotated?

A

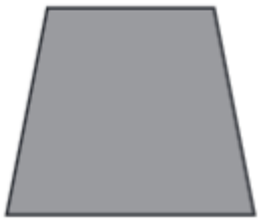
B

C

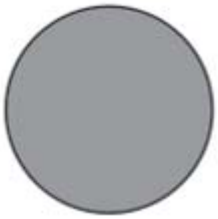
D

Question 2

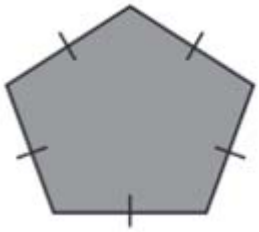
Which of these shapes has the fewest lines of symmetry?



A



B



C

D

Question 3

How many lines of symmetry does this shape have?

One
A

Two
B

Three
C

Four
D

Question 4

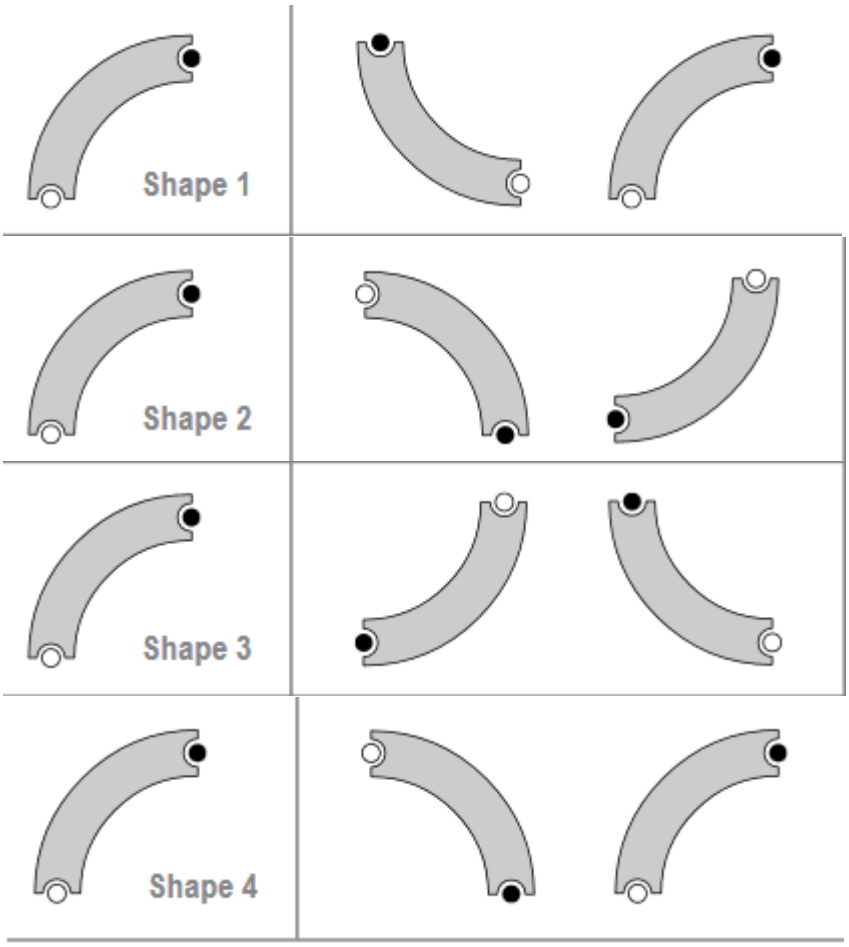
Which shape has been rotated 90 degrees to the right twice?

A

B

C

D



Question 5

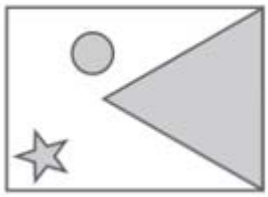
Which one of these has exactly two lines of symmetry?

A B C D

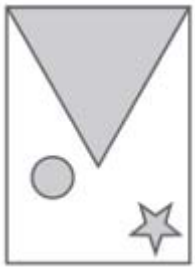
Question 6

This tile has been turned 180 degrees

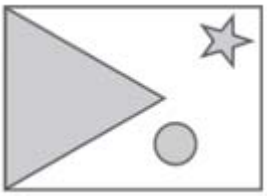
Which tile shows what it looked like before it was turned?



A



B

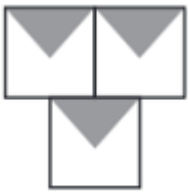


C

D

Question 7

Which shape and its pattern has no lines of symmetry?



A

B

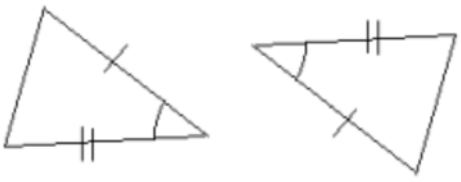
C

D

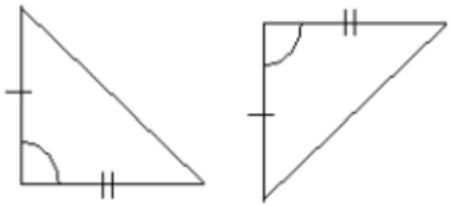
Question 8

In each pair of triangles, parts are congruent as marked. Which pair of triangles is congruent by ASA?

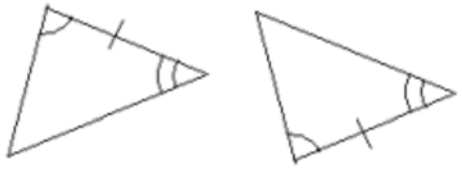
A



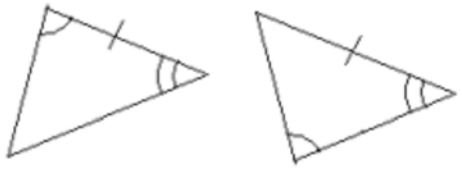
B



C

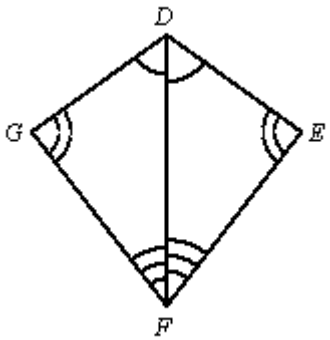


D



Question 9

From the information in the diagram, can you prove $\Delta FDG \cong \Delta FDB$? Explain.



A yes, by AAA

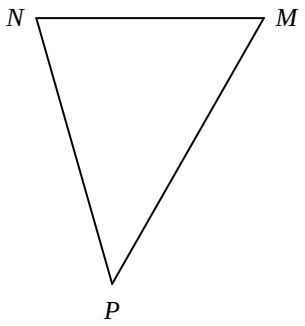
B yes, by SAS

C yes, by SSA

D no

Question 10

Name the angle formed by the sides $\overline{MP}$ and $\overline{PN}$.



A $\angle M$

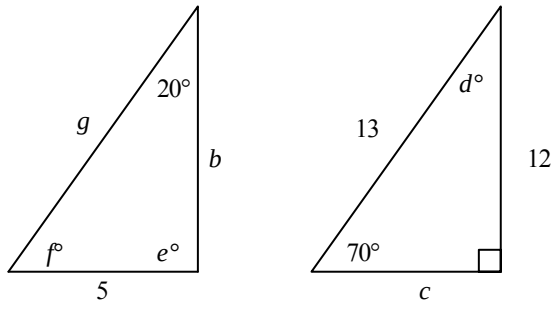
B $\angle N$

C $\angle P$

D none of these

Question 11

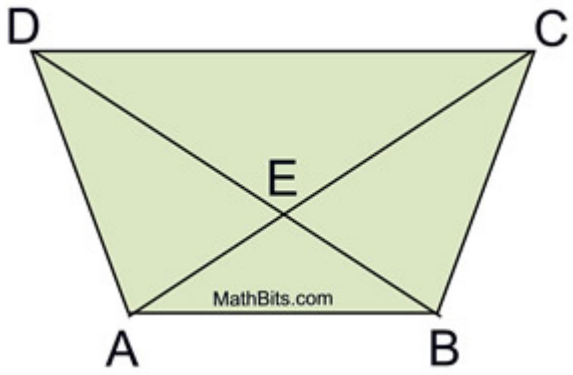
The two triangles are congruent as suggested by their appearance. Find the value of b. The diagrams are not to scale.



A 70 B 5 C 13 D 12

Question 12

ABCD is a trapezoid where $\Delta DAB \cong \Delta CBA$.
Which of the following statements is true based on the given information?



A $\overline{BD} \cong \overline{CD}$

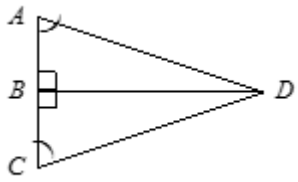
B $\overline{DA} \cong \overline{DC}$

C $\measuredangle BCE \cong \measuredangle DAB$

D $\measuredangle ACB \cong \measuredangle BDA$

Question 13

Name the rule that lets you know that $\Delta ABD \cong \Delta CBD$.



A ASA

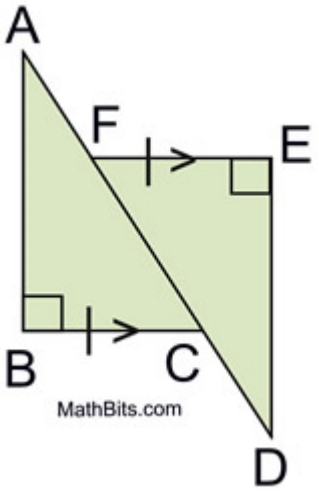
B AAS

C SAS

D none of these

Question 14

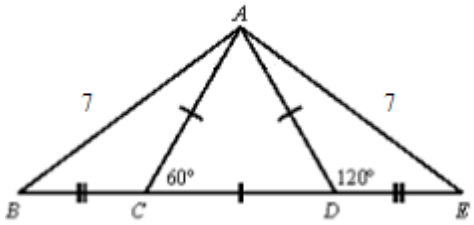
Given the triangles *ABC* and *DEF* as shown at the right. In addition to the markings, *AF* = *CD*. Which of the following methods can NOT be used to prove the triangles congruent?



A SAS
B AAS
C SSS
D RHS

Question 15

State whether ΔABC and ΔAED are congruent. Justify your answer.



A yes, by either SSS or SAS

B yes, by SAS only

C yes, by SSS only

D No; there is not enough information to conclude that the triangles are congruent.