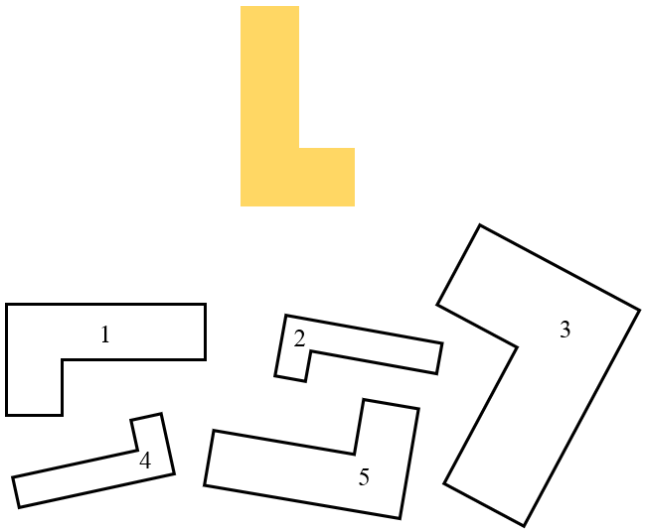
Quiz: Congruence

Section: Congruence

Sub-section: Congruent and Congruent Triangles (SSS)

Choose the correct answer.

1.



Which of these shapes are congruent to the yellow one?

(Understand, MA 2.2 G.8/4)

A. Number 1 and 2

B. Number 1 and 5

C. Number 1, 3 and 4

D. Number 2, 4 and 5

Soluiton Number 1 and 5

Geometric figures are congruent if they are the same size and shape.

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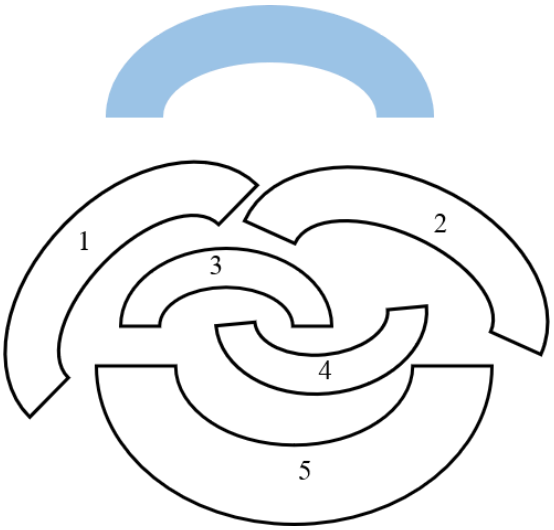
2.



Which of these shapes are congruent to the blue one?

(Understand, MA 2.2 G.8/4)

A. Number 1 and 2

B. Number 1 and 5

C. Number 1, 3 and 4

D. Number 2, 4 and 5

Soluiton Number 1 and 2

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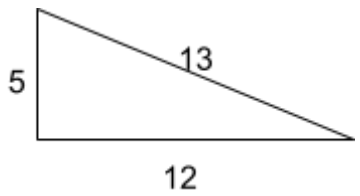
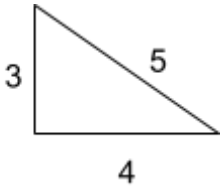
3.



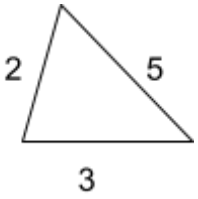
Which one of the triangles above is congruent to it?

(Understand, MA 2.2 G.8/4)

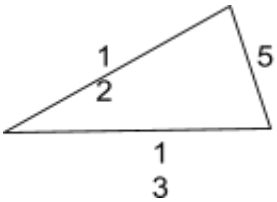
A.



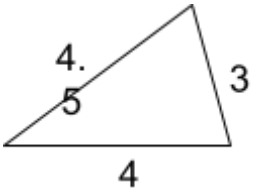
B.



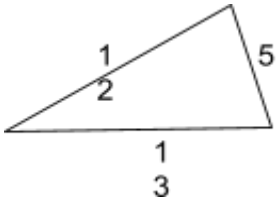
C.



D.



Solution



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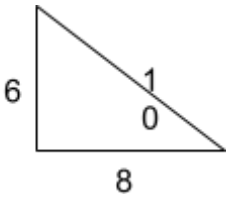
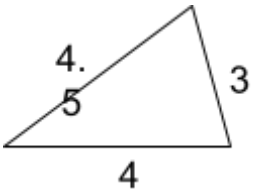
4.



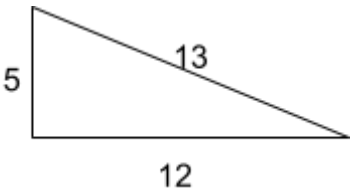
Which one of the triangles above is congruent to it?

(Understand, MA 2.2 G.8/4)

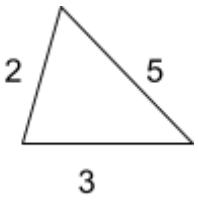
A.



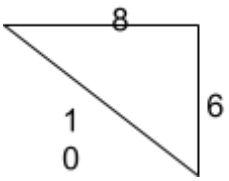
B.



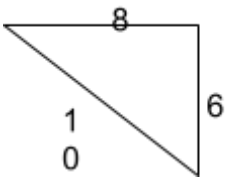
C.



D.



Solution



Geometric figures are congruent if they are the same size and shape.

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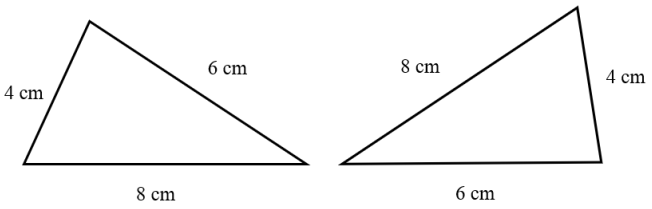
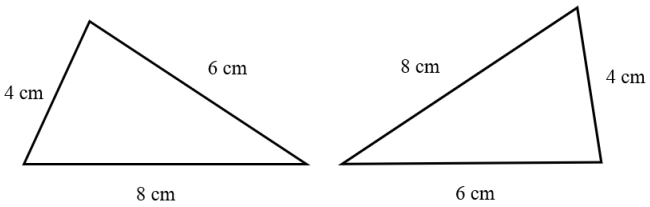
5. What postulate can be used to prove that the triangles below are congruent? (Understand, MA 2.2 G.8/4)

   A. AAS
   B. ASA
   C. SAS
   D. SSS



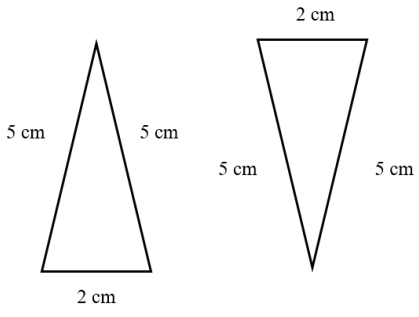
Solution



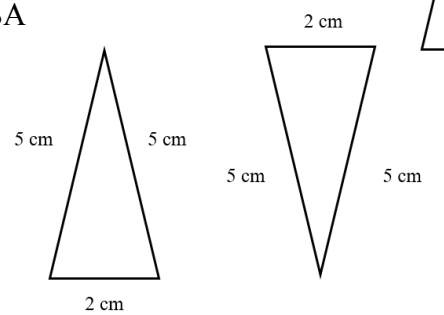
Def. of SSS: If all three sides of a triangle are equivalent to the corresponding three sides of another triangle, then the triangles are congruent.

6. What postulate can be used to prove that the triangles below are congruent? (Understand, MA 2.2 G.8/4)

   A. AAS
   B. SSS
   C. SAS
   D. ASA



Solution



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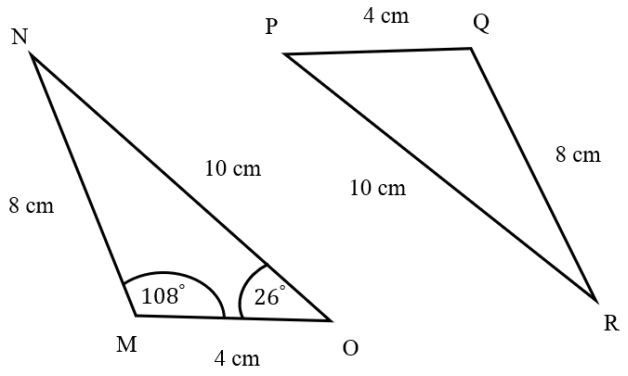
7.



In the figure above, what is the measures of $\hat{PQR}$?

(Understand, MA 2.2 G.8/4)

A. 26°

B. 46°

C. 108°

D. 134°

Solution 108°

$Length\ of\ MN\ =\ Length\ of\ QR$

$Length\ of\ NO\ =\ Length\ of\ RP$

$Length\ of\ OM\ =\ Length\ of\ PQ$

So, $\Delta MNO \cong \Delta QRP\ (SSS)$

Then $\hat{OMN}\ =\ \hat{PQR}$

Since $\hat{OMN}\ = 108^{\circ}$

Hence $\hat{PQR}\ = 108^{\circ}$

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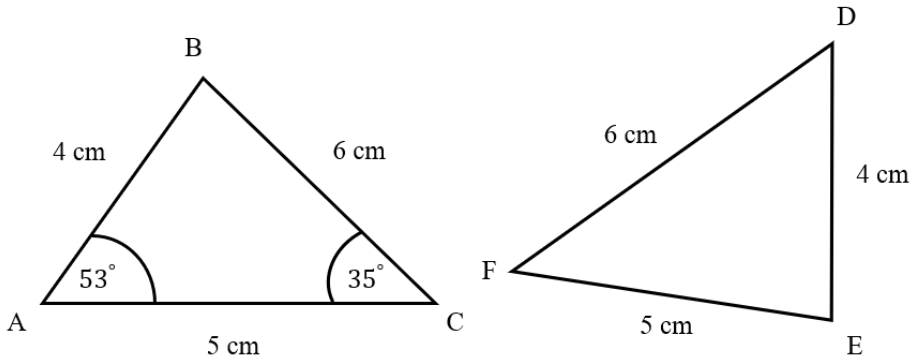
8.



In the figure above, what is the measures of $\hat{EFD}$?

(Understand, MA 2.2 G.8/4)

A. 35°

B. 53°

C. 88°

D. 92°

Solution 35°

$Length\ of\ AB\ =\ Length\ of\ ED$

$Length\ of\ BC\ =\ Length\ of\ DF$

$Length\ of\ CA\ =\ Length\ of\ FE$

So, $\Delta ABC \cong \Delta EDF\ (SSS)$

Then $\hat{ACB}\ =\ \hat{EFD}$

Since $\hat{ACB}\ = 35^{\circ}$

Hence $\hat{EFD}\ = 35^{\circ}$