

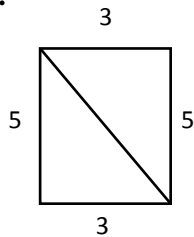
## TB(1B) Ch. 9 Congruence and Similarity

### Multiple Choice Questions

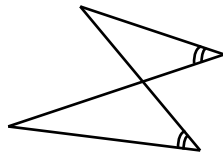
#### 1. [11-12 Final Exam, Q17]

Which of the following pairs of triangles may not be similar?

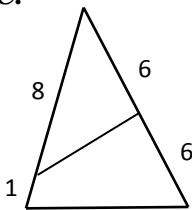
A.



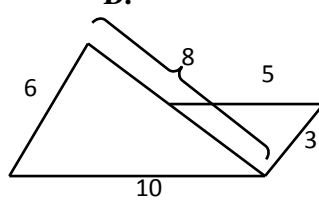
B.



C.

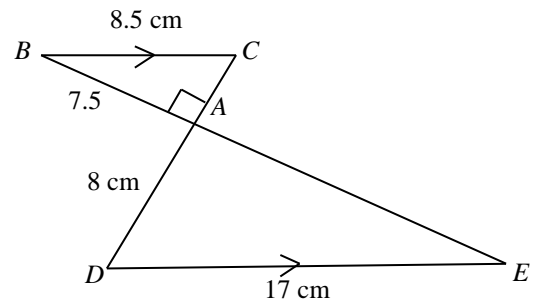


D.



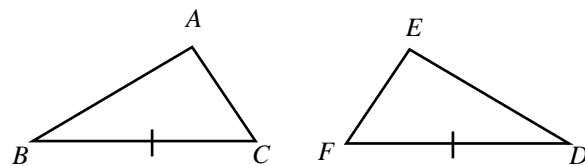
#### 2. [11-12 Final Exam, Q18]

In the figure,  $CD$  intersects  $BE$  at  $A$ .  $\angle BAC = 90^\circ$ ,  $BC = 8.5$  cm,  $AB = 7.5$  cm,  $AD = 8$  cm,  $DE = 17$  cm and  $BC \parallel DE$ . Find the area of  $\triangle ADE$ .

A.  $30 \text{ cm}^2$ B.  $60 \text{ cm}^2$ C.  $68 \text{ cm}^2$ D.  $120 \text{ cm}^2$ 

#### 3. [11-12 Final Exam, Q19]

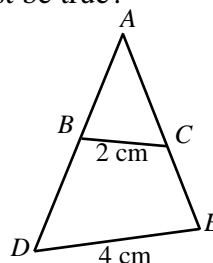
In  $\triangle ABC$  and  $\triangle EDF$ ,  $BC = DF$ . Which of the following conditions cannot be used to prove that  $\triangle ABC \cong \triangle EDF$ ?

A.  $AB = ED$  and  $\angle C = \angle D$ B.  $AB = DE$  and  $AC = EF$ C.  $\angle B = \angle D$  and  $\angle C = \angle F$ D.  $AC = EF$  and  $\angle A = \angle E = 90^\circ$ 

## 4. [12-13 Final Exam, Q9]

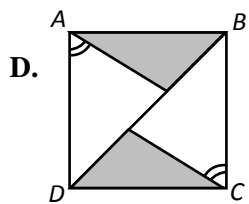
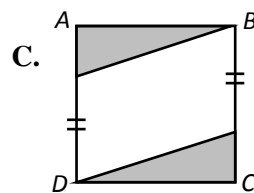
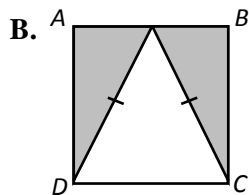
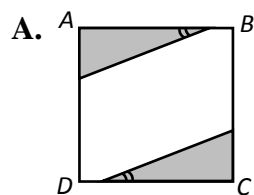
It is given that  $\triangle ABC \sim \triangle ADE$ . Which of the following must be true?

- A.  $\angle D = \angle E$
- B.  $AB = AC$
- C.  $BC \parallel DE$
- D.  $AB = 1$  cm and  $BD = 2$  cm



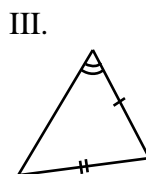
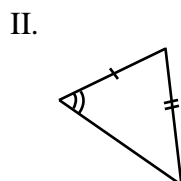
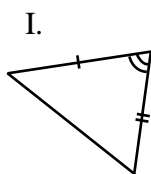
## 5. [12-13 Final Exam, Q17]

It is given that  $ABCD$  is a square. Which of the following pairs of shaded triangles may not be congruent?



## 6. [13-14 Final Exam]

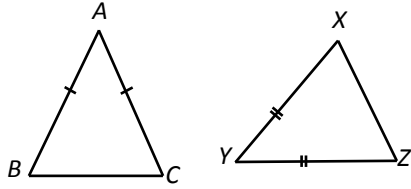
Which of the following triangles must be congruent?



- A. I and II only
- B. I and III only
- C. II and III only
- D. None of the above

**7. [13-14 Final Exam]**

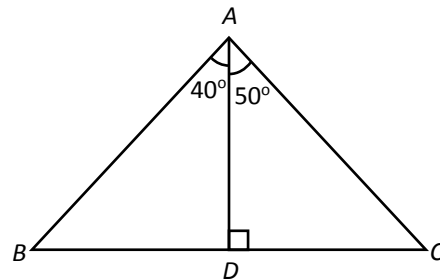
What additional information is needed to prove  $\triangle ABC \sim \triangle YZX$ ?



- A.  $\angle B = \angle Y$       B.  $AB = XZ$   
 C.  $BC = XZ$       D.  $\angle A = \angle Y$

**8. [14-15 Final Exam]**

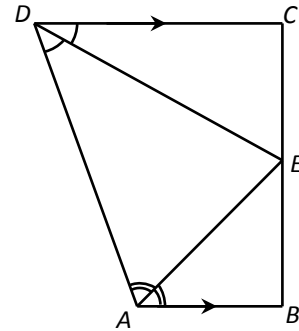
In the figure,  $AD \perp BC$ ,  $\angle BAD = 40^\circ$  and  $\angle DAC = 50^\circ$ . Which of the following is correct?



- A.  $\triangle ABD \cong \triangle ACD$  (ASA)  
 B.  $\triangle ABD \cong \triangle ACD$  (RHS)  
 C.  $\triangle ABD \cong \triangle CAD$  (AAS)  
 D.  $\triangle ABD \sim \triangle CAD$  (AAA)

**9. [14-15 Final Exam]**

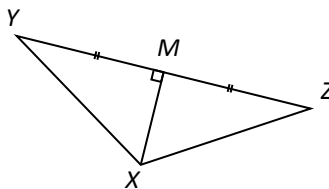
In the figure,  $ABCD$  is a trapezium with  $AB \parallel DC$ .  $AE$  bisects  $\angle DAB$  and  $DE$  bisects  $\angle ADC$ . Which of the following must be correct?



- I.  $BE = EC$   
 II.  $\angle AED = 90^\circ$   
 III.  $\triangle ABE \sim \triangle ECD$
- A. I only  
 B. II only  
 C. I and III only  
 D. II and III only

**10. [15-16 Final Exam, #10]**

In the figure,  $M$  is the mid-point of  $YZ$  and  $XM \perp YZ$ . The most direct reason for  $\triangle XMY \cong \triangle XMZ$  is



- A. SAS.      B. RHS.  
 C. ASA.      D. SSS.

~ End ~