TB(1B) Ch. 9 Congruence and Similarity Multiple Choice Questions

1. [13-14 Final Exam]

Which of the following triangles must be congruent?

I.

II.



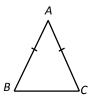
III.

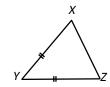


- **A.** I and II only
- **B.** I and III only
- C. II and III only
- **D.** None of the above

2. [13-14 Final Exam]

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



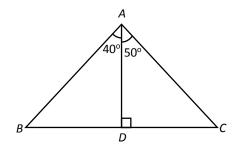


- **A.** $\angle B = \angle Y$
- **B.** AB = XZ
- C. BC = XZ
- **D.** $\angle A = \angle Y$

3. [14-15 Final Exam #10]

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)

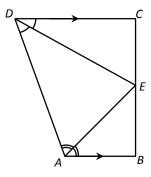


4. [14-15 Final Exam #20]

In the figure, ABCD is a trapezium with

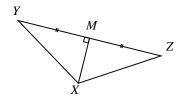
AB // DC. AE bisects $\angle DAB$ and DE bisects $\angle ADC$. Which of the following must be correct?

- 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



5. [15-16 Final Exam, #10]

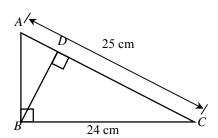
In the figure, M is the mid-point of YZ and XM \perp YZ. The most direct reason for $\triangle XMY \cong \triangle XMZ$ is



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

6. [16-17 Final Exam, #19]

In the figure, AC = 25 cm and BC = 24 cm. By considering ABC and BDC, find the length of AD.

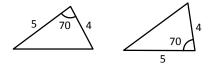


- **A.** 0.96 cm
- **B.** 1.04 cm
- **C.** 1.96 cm
- **D.** It cannot be determined.

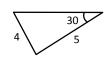
7. [17-18 S Test 2, #5]

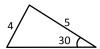
Which of the following pairs of triangles **MUST** be congruent?

A.

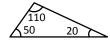


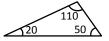
B.





C.





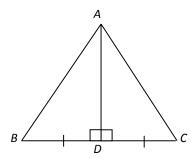
D.





8. [17-18 S Test 2, #15]

In the figure, the condition that $\triangle ABD \cong \triangle ACD$ is

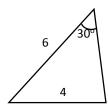


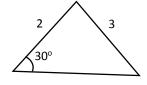
- A. SAS.
- **B.** ASA.
- C. SSA.
- **D.** RHS.

9. [17-18 S Test 2, #19]

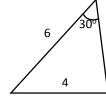
Which of the following pairs of triangles must be similar?

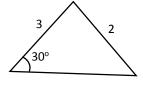
A.



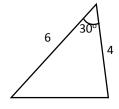


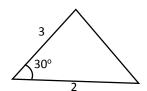
B.





C.





D.

