TB(1B) Ch.11-Congruent Triangles Multiple Choice Questions

1. [17-18 S Test 2, #5]

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









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

In the figure, AB //CD. AED and BEC are straight lines. Which of the following must be true? I. $\angle AEC = \angle ABE + \angle CDE = A = B$

- II. $\angle ABE = \angle DCE$
- III. $\triangle AEB \cong \triangle DEC$
- A. I and II only
- **B.** I and III only
- C. II and III only
- **D.** I, II and III



3. [17-18 S Test 2, #15]

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



4. [18-19 S Test 2, #5]

Which triangles are congruent?



- A. $\triangle ABC \cong \triangle PQR$
- **B.** $\triangle ABC \cong \triangle XYZ$
- C. $\Delta PQR \cong \Delta XYZ$
- **D.** $\triangle ABC \cong \triangle PQR \cong \triangle XYZ$

5. [18-19 Final Exam, #17]

In the figure, *ABC* and *BED* are straight lines and $\angle A = \angle D$. *DE* =

- A. 5.
 B. 6.
 C. 7.
- **D.** 8.

6. [18-19 Final Exam, #20]

In the figure, parallelogram *ABCD* is congruent to parallelogram *EFGH*. It is given that *AFKBE* and *DJC* are straight lines, *BC* intersects *FG* at *I*, $AJ \perp DC$ and $IK \perp AE$. If AK = KE = 6 cm, DC = 8 cm, IK = 8 cm and AJ = 12 cm. Which of the following statements are true?

- I. KB = 2 cm
- II. DJ = 2.8 cm
- III. The area of AEHGICD is 176 cm².
- A. I and II only
- **B.** I and III only
- C. II and III only
- **D.** I, II and III

7. [20-21 Final Exam #12]

It is given that $\triangle ABC \cong \triangle QPR$. If $\angle B = 85^{\circ}$ and $\angle C = 30^{\circ}$, then $\angle Q =$

- **A.** 65°.
- **B.** 75°.
- **C.** 85°.
- **D.** 95°.



Α

D

F

K B

CG

Ε

Н

8. [20-21 Final Exam #17]

In the figure, *BED* is a straight line. If $\triangle ABE \cong \triangle BCD$, AE = 13, DE = x + 3 and CD = x, then x =



- **A.** 5.
- **B.** 6.
- **C.** 7.
- **D.** 8.

9. [20-21 Final Exam #24]

In the figure, *ABDE* is a parallelogram. *F* and *C* are mid-points of *AE* and *BD* respectively. Which of the following(s) must be true?



- I. $\triangle ABF \cong \triangle CFB$
- II. $\angle BCF = \angle DCF$
- III. BF = DF
- A. I only
- **B.** II only
- C. I and II only
- **D.** I, II and III