

4-1 Standardized Test Prep

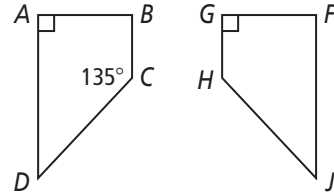
Congruent Figures

Multiple Choice

For Exercises 1–6, choose the correct letter.

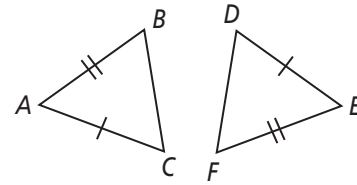
1. The pair of polygons at the right is congruent. What is $m\angle J$?

- (A) 45 (C) 135
 (B) 90 (D) 145



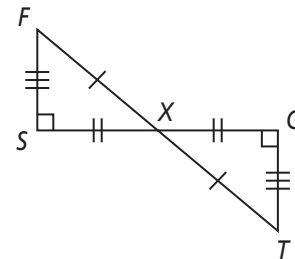
2. The triangles at the right are congruent. Which of the following statements must be true?

- (F) $\angle A \cong \angle D$ (H) $\overline{AB} \cong \overline{DE}$
 (G) $\angle B \cong \angle E$ (I) $\overline{BC} \cong \overline{FD}$



3. Given the diagram at the right, which of the following must be true?

- (A) $\triangle XSF \cong \triangle XTG$ (C) $\triangle FXS \cong \triangle XGT$
 (B) $\triangle SXF \cong \triangle GXT$ (D) $\triangle FXS \cong \triangle GXT$



4. If $\triangle RST \cong \triangle XYZ$, which of the following need not be true?

- (F) $\angle R \cong \angle X$ (G) $\angle T \cong \angle Z$ (H) $\overline{RT} \cong \overline{XZ}$ (I) $\overline{SR} \cong \overline{YZ}$

5. If $\triangle ABC \cong \triangle DEF$, $m\angle A = 50$, and $m\angle E = 30$, what is $m\angle C$?

- (A) 30 (B) 50 (C) 100 (D) 120

6. If $ABCD \cong QRST$, $m\angle A = x - 10$, and $m\angle Q = 2x - 30$, what is $m\angle A$?

- (F) 10 (G) 20 (H) 30 (I) 40

Short Response

7. Given: $\overline{AB} \parallel \overline{DC}$, $\overline{AD} \parallel \overline{BC}$, $\overline{AB} \cong \overline{CD}$, $\overline{AD} \cong \overline{CB}$

Prove: $\triangle ABD \cong \triangle CDB$

