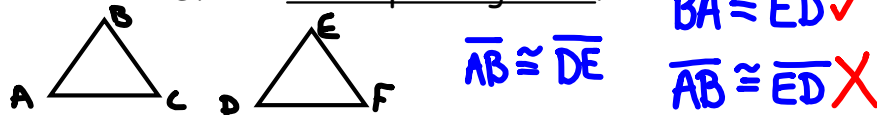


Chapter 5: Congruent Triangles

5.1 Congruence and Triangles

Suppose triangle ABC slides over to fit on triangle DEF. When the vertices are matched this way, angle A and angle D corresponding angles and AC and DF are corresponding sides.



Corresponding angles and corresponding sides are examples of corresponding parts.

Figures are congruent if all pairs of corresponding angles are congruent and all pairs of corresponding sides are congruent. (same size and shape)

Checkpoint at the bottom of page 234.

1. $\triangle STU \cong \triangle YXZ$ ★

$$\overline{ST} \cong \overline{YX} \quad \angle U \cong \angle Z$$

$$\overline{US} \cong \overline{ZY} \quad \angle T \cong \angle X$$

$$\overline{TU} \cong \overline{XZ} \quad \angle S \cong \angle Y$$

2. $\triangle ABC \cong \triangle DEF$ ★

$$\boxed{\overline{DF} \cong \overline{AC}} \\ \boxed{3 = 3}$$

$$\boxed{\angle B \cong \angle E} \\ \boxed{28^\circ = 28^\circ}$$

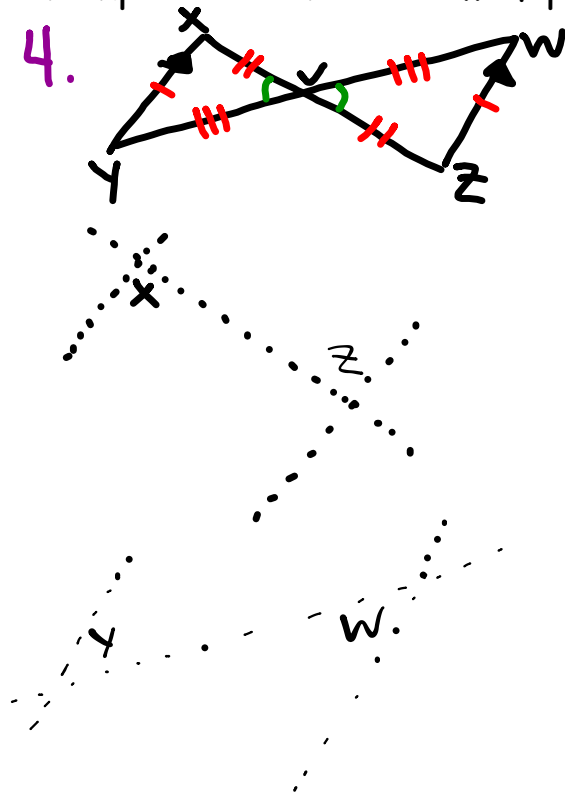
3. B

Determine whether ~~figures~~ triangle are congruent.

All 3 pairs of congruent corresponding sides.

All 3 pairs of congruent corresponding angles.

Checkpoint at the bottom of page 235.



$$\textcircled{1} \overline{XY} \cong \overline{ZW}$$

$$\textcircled{2} \overline{XV} \cong \overline{ZV}$$

$$\textcircled{3} \overline{YV} \cong \overline{WV}$$

$$\textcircled{1} \angle XVY \cong \angle ZVW$$

(vertical \angle s)

$$\textcircled{2} \angle X \cong \angle Z$$

(alt. int. \angle s)

$$\textcircled{3} \angle Y \cong \angle W$$

(alt. int. \angle s)

$$\triangle XVY \cong \triangle ZVW$$

Name

5.1

pg. 236-239 # 14-46 even

51-53

Notes 5.2