**H. Geometry - Bellwork #51 Date: \_\_\_\_\_\_**

From the given information, what theorem (SSS, SAS, ASA or AAS) would prove the triangles congruent.

1. ∠A ≅ ∠C, AD ≅ DC 2. HE ≅ FG, ∠EFH ≅ ∠FHG, ∠EHF ≅ ∠GFH

F

E

H

G

B

A

C

D

1. ∠U ≅ ∠W, UV ≅ WV, UX ≅ WX 4. UV ≅ WV, UX ≅ WX

V

W

U

X

V

W

U

X

1. ∠Y ≅ ∠B, YA ≅ BA 6. ∠DEG ≅ ∠FEG, DE ≅ EF

G

F

D

E

C

B

Y

A

Z

1. ∠HJK ≅ ∠MLK, JH ≅ ML 8. ∠A ≅ ∠D, AB ≅ DE, ∠F ≅ ∠C

A

F

D

C

B

E

H

K

J

M

L

Write a two-column proof.

9. **Given:** AB ≅ DB

C is the midpoint of AD.

**Prove:** ΔABC ≅ ΔDBC

A

B

C

D

#### Statements

#### Reasons

10. **Given:** AB ll CD

∠CAB ≅ ∠ACD

**Prove:** ΔACD ≅ ΔABC

A

B

C

D

#### Statements

#### Reasons