Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Points: \_\_\_\_\_\_

1. In the figure, AC=AD, BC=BD.,, 

a) Write the congruence statement and give a reason (SAS, ASA, AAS or SSS Theorems).

b) Find *x*,, , .

C

B

D

A

2. In the figure, and. AB=y+6, BC=3y, CD=2x-2 and AD=x+1.

a) Write the congruence statement and give a reason (SAS, ASA, AAS or SSS Theorems).

b) Find x, y, AB, BC, CD and AD.

C

B

D

A

3. In the figure,. AB=, BC=2*x*.

a) Write the congruence statement and give a reason (SAS, ASA, AAS or SSS Theorems).

b) Find *x*, AB and BC.

B

A

C

D

4. In the figure, AB=BD and BC=BE. , , , .

a) Write the congruence statement and give a reason (SAS, ASA, AAS or SSS Theorems).

b) Find *x*, *y*, , ,,.

D

C

A

B

E

5. AB and DC are parallel, AB=CD, AE = 2y-x, EC= 2x+7, BE= x+2, ED= y-2x. Solve for x and y. Find the lengths of AC and BD.

D

A

E

C

B