

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

## 5.6 Notes – Coordinate Proofs

What are Coordinate Proofs?

Proving conjectures about figures in the coordinate plane. You can use variables in your coordinates to prove conjectures about all figures of a certain type. The following are used heavily in coordinate proofs:

**Distance Formula**

**Midpoint Formula**

**Pythagorean Thm**

**CPCTC**

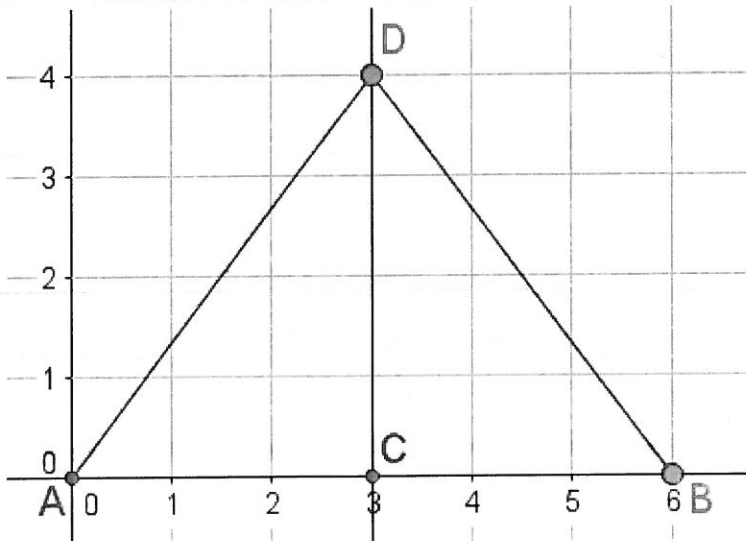
**SSS**

**HL**

**Slopes**

Prove angle ADC is congruent to angle BDC.

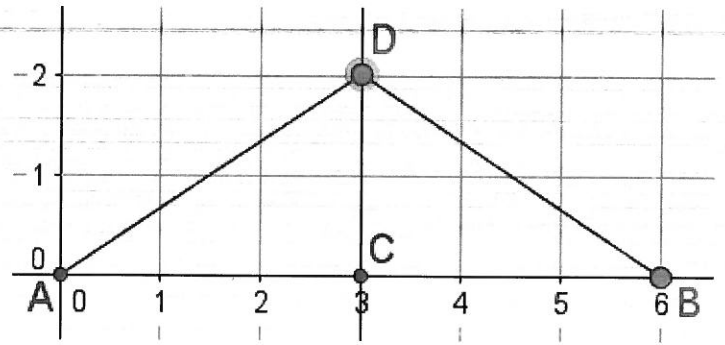
Write a plan for your proof:



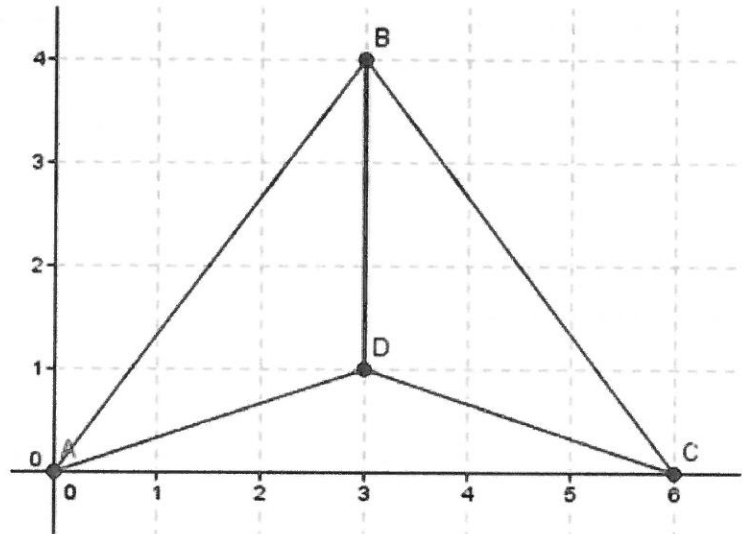
Proof:

Now prove ADB is an isosceles triangle.

2. First write a plan, then prove CD is an angle bisector of angle ADB.



3. First write a plan, then prove DB bisects angle ABC.



Write the congruence theorem that proves the two triangles are congruent. If they are not, write "not congruent".

