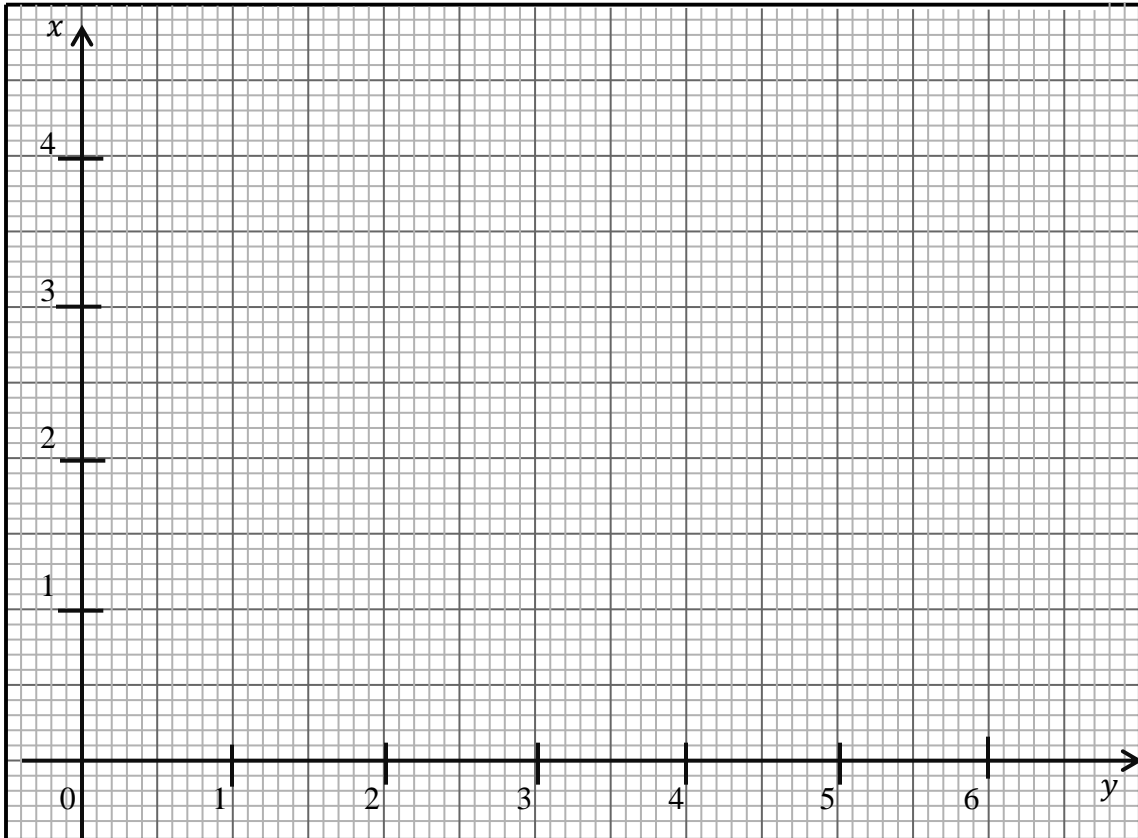


1. Draw a parallelogram at points  $A(1,1)$ ,  $B(4,1)$ ,  $C(5,3)$  and  $D(2,3)$  and draw a diagonal to the parallelogram joining points B and D.



2. Using a protractor, measure  $\angle ADB$ .
3. Using a protractor, measure  $\angle DBC$ .  
Is  $\angle ADB = \angle DBC$ ?
4. Using a protractor, measure  $\angle ABD$ .
5. Using a protractor, measure  $\angle CDB$ .  
Is  $\angle CDB = \angle ABD$ ?

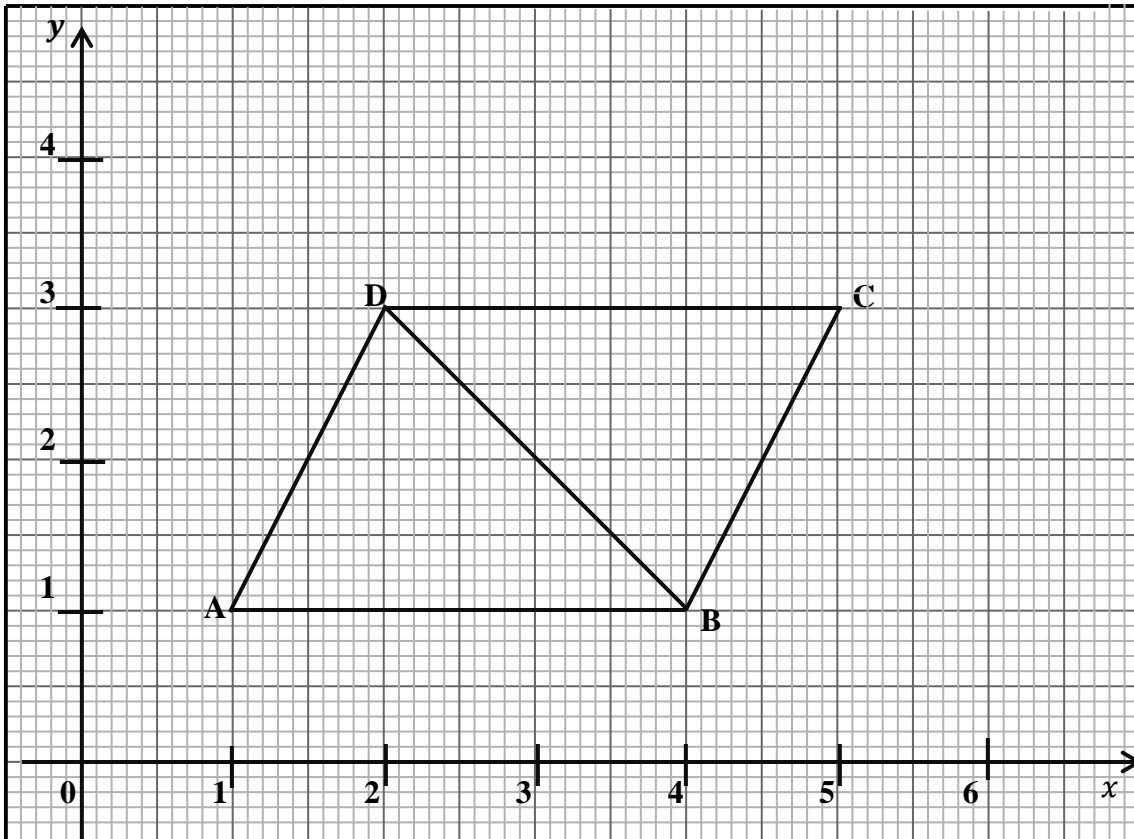
6. State which postulates which makes  $\triangle ABD \cong \triangle BCD$ .
  
7. State which side in  $\triangle BDC$  corresponds to side  $AB$  in  $\triangle ABD$ ?
  
8. State which side in  $\triangle BDC$  corresponds to side  $AD$  in  $\triangle ABD$ ?

In this activity, students will draw a parallelogram and use it to determine congruence of opposite sides. Students will work in groups of at least three and the students in the respective groups will be equipped with a grid, a ruler, a protractor and a pencil.

## Answer Keys

Day 111:

1.



2. Same response for all students.

3. Same angle as the one above

Yes

4. Same response for all students.

5. Same angle as the one above

Yes

6. A.SA Postulate

7. CD

8. AD