

Verifying Properties of Squares

Activity 6

- 1) Find the center of the square by folding the mid parallels.
- 2) Now fold the corners of the square so that they meet at the center. Four right triangles and a square are formed.
- 3) Compare the area of this square to the area of the original square.

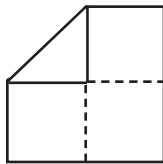


Figure 8
One corner folded to the center

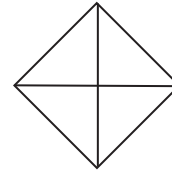


Figure 9
Four corners folded to the center

Activity 7

Mathematicians have agreed that the measure of a right angle is 90° .

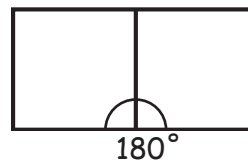
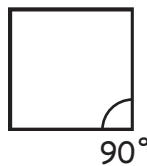


Figure 10

- 1) Verify that two right angles put together form a straight line. Therefore, the measure of a straight angle is 180° .

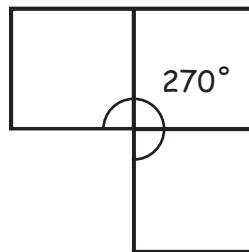


Figure 11
Three adjacent right angles.

- 2) Verify that four right angles put together fit exactly. The full turn is therefore 360° .

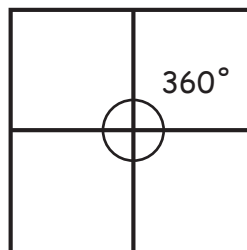


Figure 12
Four adjacent right angles