Introduction to Lines and Angles

A. Choose the Correct Answer:

1. Which of the following is a correct definition of a line?

a) A straight path that has two endpoints

b) A straight path that extends infinitely in both directions

c) A straight path that extends infinitely in one direction

d) A curved path with no endpoints

2. What is the measure of a right angle?

a) 45° b) 90°

c) 120° d) 180°

3. Two lines that never meet and are always at the same distance apart are called:

a) Intersecting lines b) Parallel lines

c) Perpendicular lines d) Ray

B. Write the Missing Terms to Complete the Sentences:

1. A line extends _____ in both directions.

2. An angle that measures 180° is called a _____ angle.

3. Two lines that cross each other at a point are called _____ lines.

4. A part of a line that has one endpoint and extends infinitely in one direction is called a _____.

5. The sum of angles on a straight line is always _____ degrees.

C. Figure out the answers to these questions:

1. Define a line segment with an example.

2. What is the difference between a ray and a line?

3. How many degrees are there in a complete turn (full rotation)?

4. Draw and label a right angle, acute angle, and obtuse angle in your notebook.

5. If one angle of a straight line is 110°, find the measure of the other angle.

D. Challenge yourself with these questions:

1. A carpenter is making a table and needs to cut a wooden plank at a right angle. What should be the angle measurement in degrees?
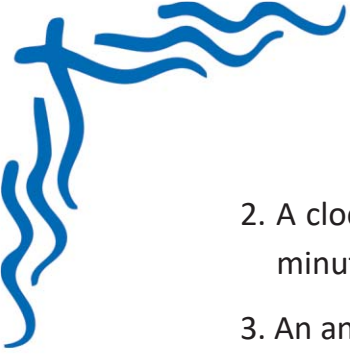
2. A clock shows the time as 3:00. What type of angle is formed by the hour and minute hands?

3. An angle is 40° less than a right angle. What is its measure?

4. Identify whether the given figure has parallel or perpendicular lines. (Provide a diagram in the textbook/classwork.)

5. Find the sum of two complementary angles if one of them is 35°.

E. Mark each sentence with a True (✓) or False (✗):

1. A straight angle measures exactly 90°.

2. Two perpendicular lines intersect at 90°.

3. An acute angle is greater than 90° but less than 180°.

4. A line has two endpoints.

5. The sum of two supplementary angles is always 180°.