

Grade 4 • Unit 7 Worksheet

Angles and Angle Measurement

Name: _____

Date: _____

Part A • Geometry Vocabulary

1. Draw each figure (sketch with labels).

A POINT labeled A.

A LINE through points B and C.

A RAY starting at point D and going through E.

A LINE SEGMENT from F to G.

2. Draw a pair of PARALLEL lines and a pair of PERPENDICULAR lines. Label them.

What is the difference between parallel and perpendicular lines?

Part B • What Is an Angle?

3. Sam looks at two figures. Figure A has two rays sharing the same starting point. Figure B has a curve with arrows at both ends. Which figure shows an ANGLE? Why?

4. Look at the corners of the letter L, the letter X, and the letter T. Which letters have a RIGHT angle? Which have angles that AREN'T right angles? Explain.

Part C • Measuring Angles

5. A full turn is 360° . Fill in each blank.

Half a full turn = _____ $^\circ$. This is called a _____ angle.

Quarter of a full turn = _____ $^\circ$. This is called a _____ angle.

An angle SMALLER than a right angle is called _____.

An angle BIGGER than a right angle but smaller than a straight angle is called _____.

6. Estimate the measure of each angle. Then say whether it is acute, right, obtuse, or straight.

Corner of a square: estimate _____ $^\circ$, type _____

Slightly less than that corner: estimate _____ $^\circ$, type _____

An angle that opens to almost a straight line: estimate _____ $^\circ$, type _____

Just past a square corner: estimate _____ $^\circ$, type _____

Part D • Angles on a Clock

7. The minute hand goes all the way around the clock in 60 minutes — a full 360° turn.

How many degrees does the minute hand turn in 30 minutes? _____ $^\circ$

In 15 minutes? _____ $^\circ$

In 5 minutes? _____ $^\circ$

In 1 minute? _____ $^\circ$

8. At 3:00, what angle do the hour hand and the minute hand make? Explain.

Angle: _____°

Part E • Composing and Decomposing Angles

9. A straight angle is split into two parts. One part is 67° . What is the OTHER?

Show your work:

Other angle: _____°

10. Inside a right angle there are two smaller angles. The first is 35° . What is the second?

Show your work:

Second angle: _____°

11. Three angles meet at a point and together form a straight line. Their measures are 41° , 65° , and $?$. What is $?$

Show your work:

$? =$ _____°

Part F • Thinking Deeply

12. Diego says, "A longer ray makes a bigger angle." Is Diego correct? Draw a picture or explain to convince a friend.

