

**Student Activity Book**

**Measuring Angles**

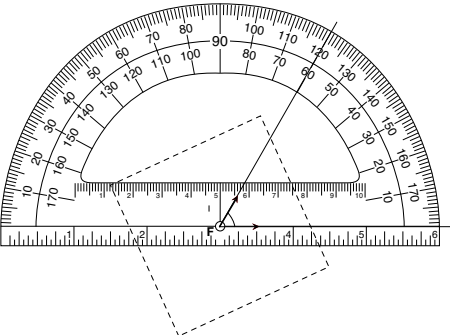
**Questions 1–2 (SAB pp. 323–324)**

1. **A.** Responses will vary.  
**B.**  $60^\circ$   
**C.** Responses will vary.
2. **A–C.** Responses will vary.

Name \_\_\_\_\_ Date \_\_\_\_\_

**Measuring Angles**

1. Maya measured  $\angle F$  from the Angle Sort Cards. She taped the card in the center of the paper and extended the rays of the angle.



Copyright © Kendall Hunt Publishing Company

**A.** Record your angle description from the back of the  $\angle F$  card.

**B.** What is the measure of  $\angle F$ ? \_\_\_\_\_

**C.** Compare your estimate to your measurement.

---

Measuring and Estimating Angles SAB • Grade 4 • Unit 9 • Lesson 4 323

**Student Activity Book - Page 323**

Name \_\_\_\_\_ Date \_\_\_\_\_

2. Use Maya's method and your protractor to measure the size of a different angle from the Angle Sort Cards.

Copyright © Kendall Hunt Publishing Company

**A.** Record your angle size description from the back of the card.

**B.** What is the measure of your angle? \_\_\_\_\_ .

**C.** Compare your description to your measurement.

The Drawing Angles section of the *Student Guide* shows how to use a ruler and protractor to draw angles.

---

324 SAB • Grade 4 • Unit 9 • Lesson 4 Measuring and Estimating Angles

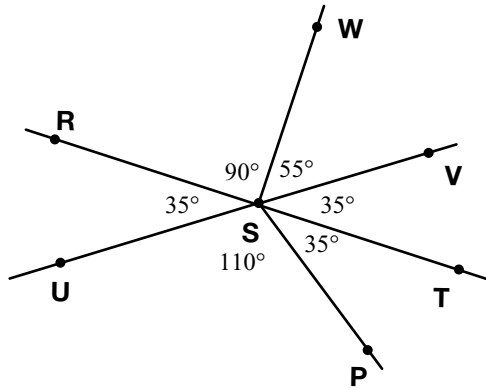
**Student Activity Book - Page 324**

Copyright © Kendall Hunt Publishing Company

Student Activity Book

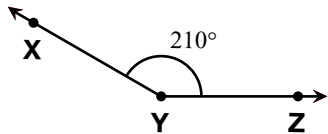
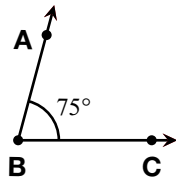
Draw and Solve Problems with Angles

Questions 1–16 (SAB pp. 325–328)



1. See figure above.
2. See figure above.
3. Possible response:  $90^\circ - 35^\circ = 55^\circ$
4. See figure above.
5.  $\angle RSU$ . Possible response:  $\overline{UV} = 180^\circ$ ,  $\angle VSW = 55^\circ$ ,  $\angle WSR = 90^\circ$ ,  $55^\circ + 90^\circ = 145^\circ$ ,  $180^\circ - 145^\circ = 35^\circ$
6. Possible response:  $180^\circ - 35^\circ = 145^\circ$
7. A.  $35^\circ + 35^\circ = 70^\circ$   
 B.  $35^\circ + 55^\circ = 90^\circ$   
 C.  $145^\circ + 35^\circ = 180^\circ$   
 D.  $55^\circ + 35^\circ + 35^\circ = 125^\circ$   
 E.  $35^\circ + 110^\circ + 35^\circ = 180^\circ$

8.

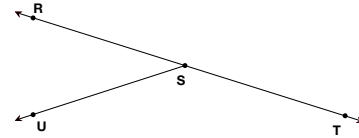


Copyright © Kendall Hunt Publishing Company

Name \_\_\_\_\_ Date \_\_\_\_\_

Draw and Solve Problems with Angles

Use the following figure to draw the angles below. Read all directions carefully.



1. Draw and label  $\angle TSV$  so it measures  $35^\circ$ .
2. Draw and label  $\angle TSW$  so it measures  $90^\circ$ .
3. Write a number sentence to show the measurement of  $\angle VSW$ . Measure to check your solution.
4. Draw a different  $35^\circ$  angle and label it  $\angle TSP$ .
5. What other angle is equal to  $\angle TSV$ ? \_\_\_\_\_ How do you know?
6. Write a number sentence to show the measurement of  $\angle RSP$ , then measure to check your solution.

Copyright © Kendall Hunt Publishing Company

Measuring and Estimating Angles

SAB • Grade 4 • Unit 9 • Lesson 4 325

Student Activity Book - Page 325

Name \_\_\_\_\_ Date \_\_\_\_\_

7. What are the measurements of the following angles? Write number sentences to show your solutions.
  - A.  $\angle PST + \angle TSV =$  \_\_\_\_\_
  - B.  $\angle PST + \angle VSW =$  \_\_\_\_\_
  - C.  $\angle PSR + \angle VST =$  \_\_\_\_\_
  - D.  $\angle WSV + \angle VST + \angle TSP =$  \_\_\_\_\_
  - E. Use the figure before Question 1 to find the sum of  $\angle RSU + \angle USP + \angle PST$ . Write a number sentence.

✓ Check-In: Questions 8-16

8. Draw  $\angle ABC$  as  $75^\circ$  and  $\angle XYZ$  as  $210^\circ$ .

Copyright © Kendall Hunt Publishing Company

326 SAB • Grade 4 • Unit 9 • Lesson 4

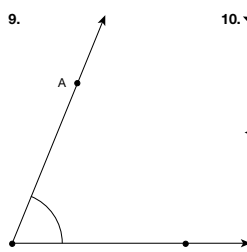
Measuring and Estimating Angles

Student Activity Book - Page 326

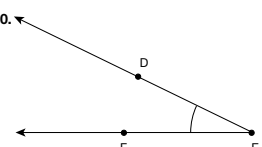
# Answer Key • Lesson 4: Measuring and Estimating Angles

Name \_\_\_\_\_ Date \_\_\_\_\_

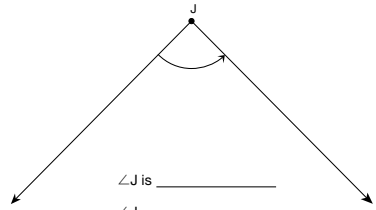
Describe the size of each angle in Questions 9–16. Then measure each of the angles with your protractor. You may need to extend the sides of some of the angles to measure.

9. 

$\angle ABC$  is a little smaller than  $90^\circ$   
 $\angle ABC =$  \_\_\_\_\_

10. 

$\angle DEF$  is \_\_\_\_\_  
 $\angle DEF =$  \_\_\_\_\_

11. 

$\angle J$  is \_\_\_\_\_  
 $\angle J =$  \_\_\_\_\_

Copyright © Kendall Hunt Publishing Company

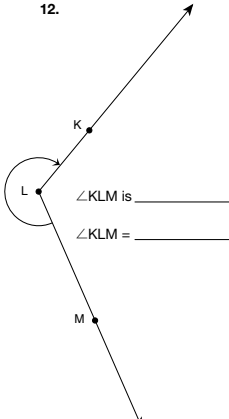
Measuring and Estimating Angles SAB • Grade 4 • Unit 9 • Lesson 4 327

9–16: Responses will vary for each estimate. Sample responses are shown.

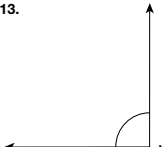
- 9.  $\angle ABC = 68^\circ$
- 10.  $\angle DEF$  is smaller than  $90^\circ$ , and closer to  $0^\circ$ .  
 $\angle DEF = 26^\circ$ .
- 11.  $\angle J$  is close to  $90^\circ$ .  $\angle J = 90^\circ$ .
- 12.  $\angle KLM$  is a reflex angle between  $180^\circ$  and  $270^\circ$ .  $\angle KLM = 244^\circ$ .
- 13.  $\angle M$  is close to  $90^\circ$ .  $\angle M = 90^\circ$ .
- 14.  $\angle P$  is close to  $90^\circ$ .  $\angle P = 90^\circ$ .
- 15.  $\angle VWX$  is larger than  $90^\circ$ .  $\angle VWX = 133^\circ$ .
- 16.  $\angle T$  is a reflex angle a little smaller than  $270^\circ$ .  
 $\angle T = 255^\circ$ .

Student Activity Book - Page 327

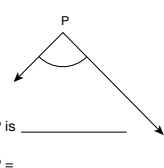
Name \_\_\_\_\_ Date \_\_\_\_\_

12. 

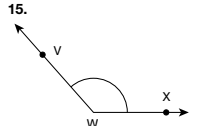
$\angle KLM$  is \_\_\_\_\_  
 $\angle KLM =$  \_\_\_\_\_

13. 

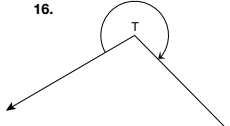
$\angle N$  is \_\_\_\_\_  
 $\angle N =$  \_\_\_\_\_

14. 

$\angle P$  is \_\_\_\_\_  
 $\angle P =$  \_\_\_\_\_

15. 

$\angle VWX$  is \_\_\_\_\_  
 $\angle VWX =$  \_\_\_\_\_

16. 

$\angle T$  is \_\_\_\_\_  
 $\angle T =$  \_\_\_\_\_

Copyright © Kendall Hunt Publishing Company

328 SAB • Grade 4 • Unit 9 • Lesson 4 Measuring and Estimating Angles

Student Activity Book - Page 328

Copyright © Kendall Hunt Publishing Company