Please do NOT tear out pages!

Unit 1 Study Links Packet

Name _____

If the assignment's name is highlighted, do it TONIGHT.
Then ask a parent to check it over.

Parent Initials

_____ Study Link 1-2 Line Segments, Lines, and Rays
_____ Study Link 1-3 Angles and Quadrangles
_____ Study Link 1-4 Classifying Quadrangles
_____ Study Link 1-5 Polygon Riddles
_____ Study Link 1-6 Properties of Geometric Figures
_____ Study Link 1-7 The Radius of a Circle
_____ Study Link 1-8 Inscribed Polygons

Parent - When homework assignment is done and checked by you please initial next to the assignment's name.

4th Grader - Be responsible. Once you get your parent's initials, put it in your go-home folder so it comes back to school tomorrow.

Name _____ Date _____ Time _____

STUDY LINK 1·2

Line Segments, Lines, and Rays

1. List at least 5 things in your home that remind you of line segments.

_____

_____

_____

Use a straightedge to complete Problems 2 and 3.

2. **a.** Draw and label line AB.

   b. Draw and label line segment AB.

   c. Explain how your drawings of $\overleftrightarrow{AB}$ and $\overline{AB}$ are different.

_____

_____

3. **a.** Draw and label ray CD.

   b. Anita says $\overrightarrow{CD}$ can also be called $\overrightarrow{DC}$. Do you agree? Explain.

_____

_____

4. Explain how a ruler is different from a straightedge.

_____

_____

Practice

5. $13 - 7 =$ _____

6. $15 - 8 =$ _____

7. _____ $= 90 - 50$

8. $140 - 60 =$ _____

9. _____ $= 57 - 39$

10. $115 - 86 =$ _____

Name Date Time

STUDY LINK 1·3

Angles and Quadrangles

Use a straightedge to draw the geometric figures.

1. Draw 2 examples of a rectangle.

2. Draw 2 examples of a trapezoid.

3. How are the polygons in Problems 1 and 2 similar? How are they different?

4. a. Draw right angle *DEF*.

5. Draw an angle that is larger than a right angle. Label the vertex *K*.

b. What is the vertex of the angle? Point _____

c. What is another name for $\angle DEF$? $\angle$ _____

Practice

6. 9 + 8 = _____ **7.** 7 + 8 = _____ **8.** 30 + 80 = _____

9. _____ = 50 + 40 **10.** _____ = 17 + 94 **11.** 158 + 93 = _____

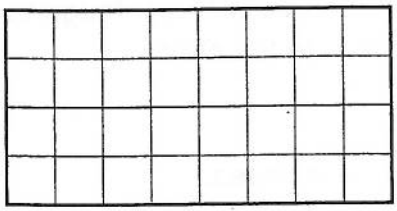
Name Date Time

STUDY LINK 1•4

Classifying Quadrangles

1. A parallelogram is a quadrangle (quadrilateral) that has 2 pairs of parallel sides.

Draw a parallelogram.



2. Answer *yes* or *no*. Explain your answer.

a. Is a rectangle a parallelogram? _____

_____

b. Is a square a parallelogram? _____

_____

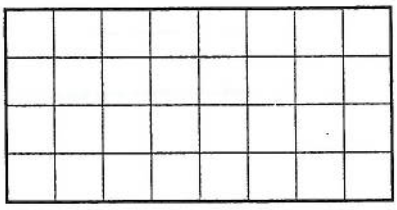
c. Is a square a rhombus? _____

_____

d. Is a trapezoid a parallelogram? _____

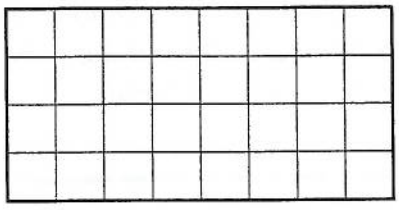
_____

3. Draw a quadrangle that has at least 1 right angle.



4. Draw a quadrangle that has 2 pairs of equal sides but is NOT a parallelogram.

This is called a _____.



Practice

5. 12 − 6 = _____ **6.** 16 − 7 = _____ **7.** 210 − 150 = _____

8. _____ = 140 − 80 **9.** _____ = 93 − 58 **10.** 123 − 76 = _____

Name _____ Date _____ Time _____

STUDY LINK 1•5

Polygon Riddles

Answer each riddle. Then use a straightedge to draw a picture of the shape in the space to the right.

SRB 96–100

1. I am a quadrangle.
I have 2 pairs of parallel sides.
All of my angles are right angles.
I am not a square.

What am I? _____

2. I am a polygon.
All of my sides have the same measure.
All of my angles have the same measure.
I have 3 sides.

What am I? _____

3. I am a polygon.
I am a quadrangle.
All of my sides are the same length.
None of my angles are right angles.

What am I? _____

Try This

4. On the back of this page, make up your own polygon riddle using 4 clues. Make 2 of the clues hard and 2 of the clues easy. Check your riddle by using a straightedge to draw a picture of the polygon. Ask a friend or someone at home to solve your polygon riddle.

Practice

5. 8 + 9 = _____ **6.** 7 + 8 = _____ **7.** 90 + 70 = _____

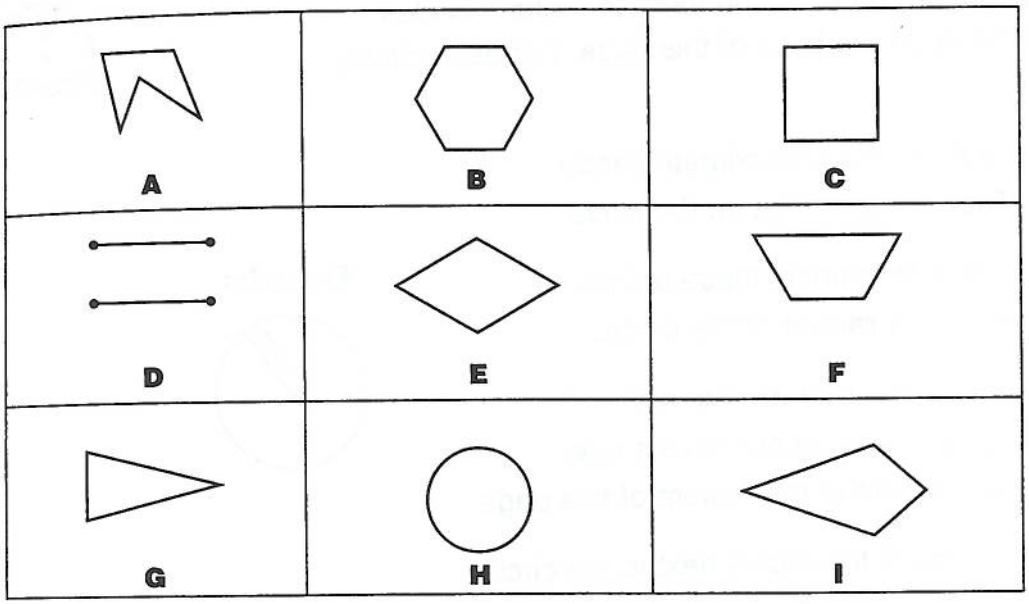
8. _____ = 60 + 50 **9.** _____ = 54 + 59 **10.** 185 + 366 = _____

Name Date Time

STUDY LINK 1•6

Properties of Geometric Figures

SRB 96–100



Write the letter or letters that match each statement.

1. These are polygons. _____

2. These are regular polygons. _____

3. These are quadrangles. _____

4. These are concave. _____

5. These are NOT parallelograms. _____

6. These do NOT have any right angles or angles whose measures are larger than a right angle. _____

Try This

7. Take a paper clip and two pencils. Create a homemade compass. You may not bend or break the paper clip. How many different size circles can you make with it? _____

Practice

8. 30 + 50 = _____

9. 40 + 60 = _____

10. 250 + 140 = _____

11. _____ = 80 − 20

12. _____ = 120 − 70

13. 460 − 230 = _____

Name Date Time

STUDY LINK 1•7

The Radius of a Circle

SRB 104

1. Find 3 circular objects. Trace around them to make 3 circles in the space below or on the back of this page. For each circle, do the following:

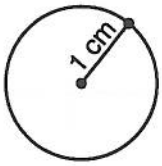
   a. Draw a point to mark the approximate center of the circle. Then draw a point on the circle.

   b. Use a straightedge to connect these points. This line segment is a **radius** of the circle.

   c. Use a ruler to measure the radius to the nearest centimeter. If you do not have a ruler at home, cut out the one at the bottom of this page.

   d. Record the measure of the radius next to the circle.

Example:



Practice

2. _____ = 80 + 20

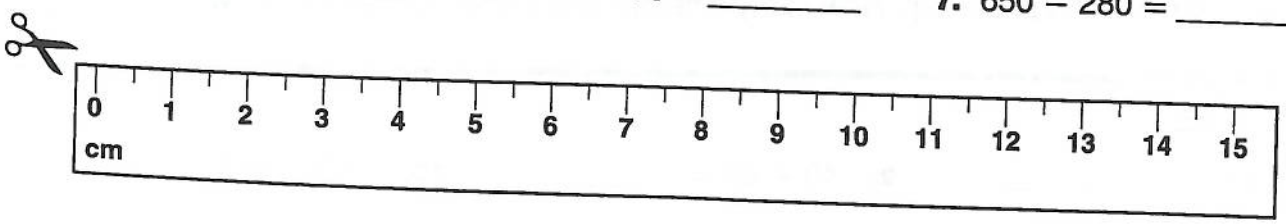
3. _____ = 30 + 90

4. 580 + 370 = _____

5. 120 − 30 = _____

6. 160 − 70 = _____

7. 650 − 280 = _____



Name Date Time

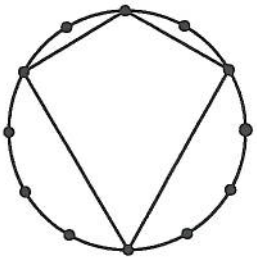
STUDY LINK 1·8

Inscribed Polygons

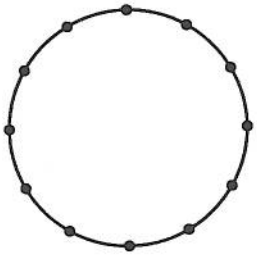
SRB 96 97 115

1. Use a straightedge to inscribe a different polygon in each of the circles below. Write the name of each polygon.

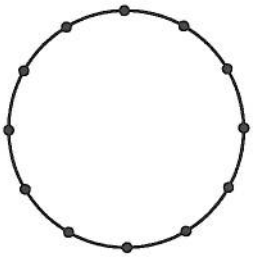
Example:



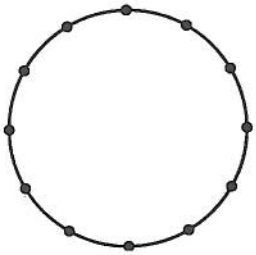
kite



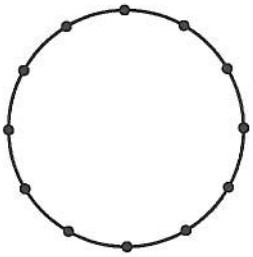
a. _____



b. _____



c. _____



d. _____

2. Are any of the polygons that you drew *regular polygons?* Explain how you know.

_____

_____

_____

Practice

3. 41 + 27 = _____

4. _____ = 263 + 59

5. 461 + 398 = _____

6. _____ = 72 − 36

7. 158 − 71 = _____

8. 742 − 349 = _____