Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_

# 5th Grade Chapter 6 – Geometry

### **Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

1. Brianna saw a map with three horizontal parallel streets and one street perpendicular to those streets that intersected the parallel streets. Which shows the arrangement of the streets on the map Brianna saw?





Which two lines are perpendicular? **C.**  $\overrightarrow{GB}$ ,  $\overrightarrow{FX}$  **D.**  $\overrightarrow{DN}$ ,  $\overrightarrow{GB}$ A.  $\overrightarrow{GB}, \overrightarrow{OC}$ **B.**  $\overrightarrow{DN}, \overrightarrow{OC}$ 

Which is not a right angle? 3.







- 7. Which of the following is a line segment that connects any two points on a circle?
  - A. chord

- C. radius
- **B.** diameter **D.** compass

- **8.** Which type of polygon has 6 sides?
  - A. quadrilateralC. pentagonB. octagonD. hexagon
- 9. How many acute angles does an obtuse triangle have?
  A. 0
  C. 2
  B. 1
  D. 3

10.	What is the measure of each angle of a rectangle?				
	A.	45°	C.	180°	
	В.	90°	D.	360°	

#### Short Answer

11. Kwan made the following drawing of an aerial view of his school's marching band to help them practice.



What tool would you use to measure the angle shown in the picture?

**12.** The hands of a clock represent a central angle of the circle formed by the face of the clock. What size is the central angle in the clock below?



13. What is the name of the segment drawn on the flying disc?



14. The fifth grade class is designing a new stage for the school play to give students a better view. Below is one of the designs they are considering. What is the name of the polygon?



- **15.** Mr. Grey asked Violet to draw a hexagon on the board. If Violet drew the hexagon correctly, how many sides did she draw?
- **16.** What is the measure of the unknown angle?



**17.** Three angles in a quadrilateral measure 32°, 66°, and 102°. What is the measure of the fourth angle?

Name: \_\_\_\_\_

**18.** Mr. White's yard has four sides. An aerial view of his yard is shown below.



What term best describes the shape of his yard?

### Other

**19. Kite Polygons** Seth's kite is shaped like the figure below.



How many triangles do you see in the figure? Make a list using capital letters of the vertices to name the triangles.

Show All Work			
Answer	triangles		

How many rectangles do you see in the figure? \_\_\_\_\_\_ How many trapezoids do you see in the figure? \_\_\_\_\_\_ How many pentagons do you see in the figure? \_\_\_\_\_\_ How many hexagons do you see in the figure? \_\_\_\_\_\_

## **5th Grade Chapter 6 – Geometry**

#### **Answer Section**

#### **MULTIPLE CHOICE**

REF: 0601 Lesson 6-1: Geometric Ideas **1.** ANS: A OBJ: Identify important geometric terms relating to lines, parts of a line, angles, and planes. TOP: Intervention K46: Geometric Ideas, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: KEY: geometry, Geography Geom.4.6 **2.** ANS: C REF: 0601 Lesson 6-1: Geometric Ideas OBJ: Identify important geometric terms relating to lines, parts of a line, angles, and planes. TOP: Intervention K46: Geometric Ideas, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry **3.** ANS: A REF: 0602 Lesson 6-2: Measuring and Classifying Angles OBJ: Measure and draw angles, and classify angles according to their measures. STO: G.GS.05.02 TOP: Intervention K49: Measuring and Classifying Angles, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6, NCTM 3-5: Meas.1.1 KEY: geometry **4.** ANS: B REF: 0605 Lesson 6-5: Classifying Triangles OBJ: Identify and classify triangles. STO: G.GS.05.06 TOP: Intervention K50: Triangles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry 5. ANS: A REF: 0601 Lesson 6-1: Geometric Ideas OBJ: Identify important geometric terms relating to lines, parts of a line, angles, and planes. TOP: Intervention K46: Geometric Ideas, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry 6. ANS: D REF: 0602 Lesson 6-2: Measuring and Classifying Angles OBJ: Measure and draw angles, and classify angles according to their measures. STO: G.GS.05.02 TOP: Intervention K49: Measuring and Classifying Angles, NCTM 3-5: Geom. 1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6, NCTM 3-5: Meas.1.1 KEY: geometry **7.** ANS: A REF: 0603 Lesson 6-3: Segments and Angles Related to Circles OBJ: Identify relationships between parts of a circle such as center, radius, diameter, chord, and central angle. STO: G.GS.05.04 TOP: Intervention K47: Circles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry 8. ANS: D REF: 0604 Lesson 6-4: Polygons OBJ: Identify and classify polygons. TOP: Intervention K45: Polygons, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.4.1 KEY: geometry **9.** ANS: C REF: 0605 Lesson 6-5: Classifying Triangles OBJ: Identify and classify triangles. STO: G.GS.05.06 TOP: Intervention K50: Triangles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry

ANS: B REF: 0606 Lesson 6-6: Classifying Quadrilaterals
 OBJ: Identify and classify quadrilaterals. STO: G.GS.05.06
 TOP: Intervention K51: Quadrilaterals, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry

#### SHORT ANSWER

11. ANS:

protractor

- REF: 0602 Lesson 6-2: Measuring and Classifying Angles
- OBJ: Measure and draw angles, and classify angles according to their measures.
- STO: G.GS.05.02

TOP: Intervention K49: Measuring and Classifying Angles, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6, NCTM 3-5: Meas.1.1

- Geom.4.1, NC1M 3-5: Geom.4.6, NC1M 3-5: Meas.
- KEY: geometry, measurement, Music
- **12.** ANS:

45°

REF: 0603 Lesson 6-3: Segments and Angles Related to Circles

OBJ: Identify relationships between parts of a circle such as center, radius, diameter, chord, and central angle. STO: G.GS.05.04

TOP: Intervention K47: Circles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1,

NCTM 3-5: Geom.4.6 KEY: geometry

**13.** ANS:

diameter

- REF: 0603 Lesson 6-3: Segments and Angles Related to Circles
- OBJ: Identify relationships between parts of a circle such as center, radius, diameter, chord, and central angle. STO: G.GS.05.04
- TOP:Intervention K47: Circles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1,NCTM 3-5: Geom.4.6KEY:geometry
- **14.** ANS:
  - octagon
  - REF: 0604 Lesson 6-4: Polygons OBJ: Identify and classify polygons.
  - TOP: Intervention K45: Polygons, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.4.1
  - KEY: geometry, Theatre
- **15.** ANS:

6 sides

- REF: 0604 Lesson 6-4: Polygons OBJ: Identify and classify polygons.
- TOP: Intervention K45: Polygons, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.4.1
- KEY: geometry

OBJ: Identify and classify triangles.

# **16.** ANS:

40°

REF: 0605 Lesson 6-5: Classifying Triangles	
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STO: G.GS.05.06

TOP: Intervention K50: Triangles, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5:

Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry, addition, subtraction

## **17.** ANS:

160°

- REF: 0606 Lesson 6-6: Classifying Quadrilaterals
- OBJ: Identify and classify quadrilaterals. STO: G.GS.05.06

TOP: Intervention K51: Quadrilaterals, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5:

Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry, addition, subtraction

## **18.** ANS:

trapezoid

REF: 0606 Lesson 6-6: Classifying Quadrilaterals

OBJ: Identify and classify quadrilaterals. STO: G.GS.05.06

TOP: Intervention K51: Quadrilaterals, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.1.5, NCTM 3-5: Geom.4.1, NCTM 3-5: Geom.4.6 KEY: geometry

## OTHER

**19.** ANS:

12

*Sample Work:* FGA, FGE, FHE, GHE, AFE, BCD, ABE, BDE, BHJ, BCJ, JCD, BHC 3; 10; 2; 1

RUBRIC		
4 points	All answers are correct AND the correct triangles are listed. Count 2 points for finding all 12 triangles, 1 point for finding 6 or more triangles, and 1/2 point for the correct number of each other type of figure.	
3 points	Most shapes were identified correctly. (See 4-point rubric.)	
2 points	About half of figures were counted or identified correctly. (See 4-point rubric.)	
1 point	Only a few shapes were counted or identified correctly. (See 4-point rubric.)	

REF: 0604 Lesson 6-4: Polygons OBJ: Identify and classify polygons.

TOP: Intervention K45: Polygons, NCTM 3-5: Geom.1.1, NCTM 3-5: Geom.4.1

KEY: geometry, 4-point rubric