Name: $\qquad$ Class: $\qquad$ Date: $\qquad$

## 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?
A.

B.

C.

D.

2. 



Which two lines are perpendicular?
A. $\overleftrightarrow{G B}, \overleftrightarrow{O C}$
B. $\overleftrightarrow{D N}, \overleftrightarrow{O C}$
C. $\overleftrightarrow{G B}, \overleftrightarrow{F X}$
D. $\overleftrightarrow{D N}, \overleftrightarrow{G B}$
3. Which is not a right angle?
A.

C.

B.

D.

4. Which of the following is an obtuse, scalene triangle?
A.

C.

B.

D.

5. Which of the following is a diagram of $\overrightarrow{X Y}$ ?
A.

B.
C.

D.

6. Which angle is obtuse?
A.

C.

B.

D.

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. quadrilateral
C. pentagon
B. octagon
D. hexagon
9. How many acute angles does an obtuse triangle have?
A. 0
B. 1
C. 2
D. 3
10. What is the measure of each angle of a rectangle?
A. $45^{\circ}$
B. $90^{\circ}$
C. $180^{\circ}$
D. $360^{\circ}$

## 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 $32^{\circ}, 66^{\circ}$, and $102^{\circ}$. What is the measure of the fourth angle?
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 $\qquad$ triangles

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

## 5th Grade Chapter 6 - Geometry

## Answer Section

## MULTIPLE CHOICE

1. 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, Geography
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
10. 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
KEY: geometry, measurement, Music
12. ANS:
$45^{\circ}$
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.4.6

KEY: 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
16. ANS:
$40^{\circ}$
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, addition, subtraction
17. ANS:
$160^{\circ}$
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 |  |
| :--- | :--- |
| $\mathbf{4}$ points | All answers are correct AND the correct triangles are listed. Count <br> 2 points for finding all 12 triangles, 1 point for finding 6 or more <br> triangles, and $1 / 2$ point for the correct number of each other type <br> of figure. |
| $\mathbf{3}$ points | Most shapes were identified correctly. (See 4-point rubric.) |
| $\mathbf{2}$ points | About half of figures were counted or identified correctly. (See <br> 4-point rubric.) |
| $\mathbf{1}$ point | Only a few shapes were counted or identified correctly. (See <br> 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

