

GRADE 4 GEOMETRY

Printable Worksheet Pack

- Lines, line segments and rays
- Parallel and perpendicular lines
- Angles and angle types
- Measuring and identifying angles
- Triangles and their properties
- Quadrilaterals
- Symmetry
- 2D and 3D shapes
- Faces, edges and vertices
- Geometry reasoning and mixed challenge
- Answer key included

Name: _____

Date: _____ Teacher: _____

Worksheet 1: Lines

Grade 4 • Geometry

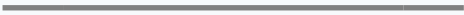
A. Identify each type of line.



1. Line segment



2. Ray



3. Line

B. Parallel or perpendicular?



4. These lines are _____.



5. These lines are _____.

6. Can perpendicular lines also be straight lines? _____

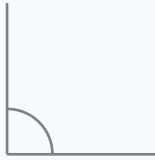
Worksheet 2: Angles

Grade 4 • Geometry

A. Name the angle type.



1. Acute



2. Right



3. Obtuse



4. Straight angle



5. Reflex angle

B. Identify each angle.

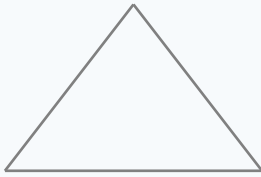
6. Is 40° acute, right or obtuse? _____ 8. Is 125° acute, right or obtuse? _____

7. Is 90° acute, right or obtuse? _____ 9. Is 180° a straight angle? _____

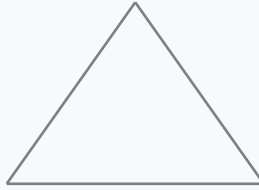
Worksheet 3: Triangles

Grade 4 • Geometry

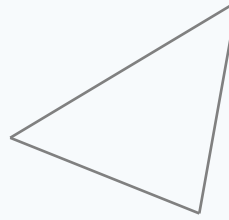
A. Identify the triangles.



1. Equilateral



2. Isosceles



3. Scalene

4. Which triangle has three equal sides? _____

5. Which triangle has exactly two equal sides? _____

6. Which triangle has no equal sides? _____

B. Triangle reasoning

7. Can a triangle have four sides? _____

8. How many angles does every triangle have? _____

9. The angles in a triangle add to _____°.

C. Challenge

10. A triangle has angles 50° and 60° . Find the third angle. _____

Worksheet 4: Quadrilaterals

Grade 4 • Geometry

A. Identify each shape.



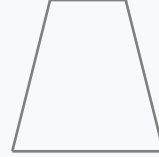
Square



Rectangle



Parallelogram



Trapezium

1. Which shape has 4 equal sides and 4 right angles? _____
2. Which shape has opposite sides equal and 4 right angles? _____
3. Which shape has two pairs of parallel sides but no right-angle requirement? _____
4. Which shape has at least one pair of parallel sides? _____

B. True or False

5. A square is a rectangle.
6. Every rectangle is a square.
7. A quadrilateral has 4 sides.
8. A parallelogram has two pairs of parallel sides.

Worksheet 5: Symmetry

Grade 4 • Geometry

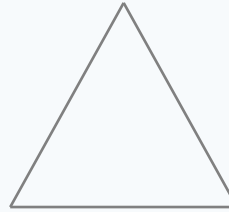
A. Draw lines of symmetry.



Square



Rectangle



Triangle

1. How many lines of symmetry does a square have? _____
2. How many lines of symmetry does a rectangle have? _____
3. How many lines of symmetry does an equilateral triangle have? _____

B. Symmetry reasoning

4. Circle: how many lines of symmetry? _____
5. Does a scalene triangle have a line of symmetry? _____
6. Draw one line of symmetry on the square above.

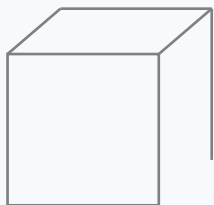
C. Challenge

7. Name one capital letter that has vertical symmetry. _____

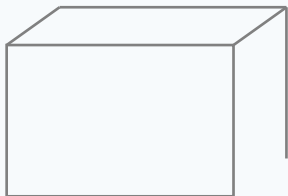
Worksheet 6: 2D & 3D Shapes

Grade 4 • Geometry

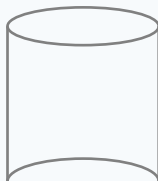
A. 3D shape properties



Cube



Cuboid



Cylinder



Cone

1. How many faces does a cube have? _____
2. How many edges does a cube have? _____
3. How many vertices does a cube have? _____
4. Which shape has a curved surface? _____

B. 2D or 3D?

5. Triangle: 2D or 3D? _____
6. Sphere: 2D or 3D? _____
7. Rectangle: 2D or 3D? _____
8. Cylinder: 2D or 3D? _____

C. Reasoning

9. Name a real-life object shaped like a cuboid. _____

Worksheet 7: Angles & Geometry Reasoning

Grade 4 • Geometry

A. Find the missing angle.

1. A right angle is split into 35° and x° . Find x . _____
2. A straight angle is split into 110° and x° . Find x . _____
3. A triangle has angles 45° , 65° and x° . Find x . _____
4. A triangle has angles 90° , 30° and x° . Find x . _____
5. Two angles make a straight line. One is 72° . Find the other. _____
6. Four right angles are equal. What is each angle? _____

B. Explain

7. Why is a square also a rectangle? Give one property they share.

Worksheet 8: Mixed Geometry Challenge

Grade 4 • Geometry

A. Solve.

1. Name a quadrilateral with four equal sides and four right angles.
2. A triangle has angles 70° and 50° . Find the third angle.
3. How many faces, edges and vertices does a cuboid have?
4. How many lines of symmetry does a square have?
5. Are 2 lines that meet at 90° parallel or perpendicular?
6. A rectangle is 8 cm long and 5 cm wide. What is its perimeter?

B. Geometry detective

7. Draw a shape that has exactly one line of symmetry and label its line of symmetry.



Answer Key: Grade 4 Geometry

Grade 4 • Geometry

Worksheet 1

1. Line segment
2. Ray
3. Line
4. Parallel
5. Perpendicular
6. Yes

Worksheet 5

1. 4
2. 2
3. 3
4. Infinitely many
5. No
6. Student draws one correctly
7. Examples: A, H, I, M, O, T, U, V, W, X, Y

Worksheet 2

1. Acute
2. Right
3. Obtuse
4. Straight
5. Reflex
6. Acute
7. Right
8. Obtuse
9. Yes

Worksheet 6

1. 6 faces
2. 12 edges
3. 8 vertices
4. Cylinder
5. 2D
6. 3D
7. 2D
8. 3D
9. Examples: cereal box, book, brick

Worksheet 3

4. Equilateral
5. Isosceles
6. Scalene
7. No
8. 3
9. 180°
10. 70°

Worksheet 7

1. 55°
2. 70°
3. 70°
4. 60°
5. 108°
6. 90°
7. Both have four right angles.

Worksheet 4

1. Square
2. Rectangle
3. Parallelogram
4. Trapezium
5. True
6. False
7. True
8. True

Worksheet 8

1. Square
2. 60°
3. 6 faces, 12 edges, 8 vertices
4. 4
5. Perpendicular
6. 26 cm
7. Answers vary; exactly one line of symmetry.