

### M3.C Geometry

#### M3.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

|  |  |
|--|--|
| <b>M3.C.1.1</b> Identify and/or describe two- and three- dimensional objects.<br><b>Reference:</b><br><b>2.9.3.A</b> | <b>M3.C.1.1.1</b> Name/identify/describe geometric shapes in two dimensions (circle, square, rectangle, triangle, pentagon, hexagon, octagon).<br><b>M3.C.1.1.2</b> Name/identify geometric shapes in three dimensions (sphere, cube, cylinder, cone, pyramid, rectangular prism). |
|--|--|

V05 3-12

### M3.C Geometry

#### M3.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

|   |  |
|---|--|
| <b>M3.C.1.2</b> Identify/draw right angles and right triangles.<br><b>Reference:</b><br><b>2.10.3.A,</b><br><b>2.10.3.B</b> | <b>M3.C.1.2.1</b> Identify/draw right angles and right triangles formed by line segments, in geometric figures, on a geoboard, and/or in real-world objects. |
|---|--|

V05 3-13

### M3.C Geometry

#### M3.C.2 Identify and/or apply concepts of transformations or symmetry.

|  |   |
|--|---|
| <b>M3.C.2.1</b> Apply the concepts of transformations and symmetry.<br><b>Reference:</b><br><b>2.9.3.E,</b><br><b>2.9.3.F,</b><br><b>2.9.3.H</b> | <b>M3.C.2.1.1</b> Recognize a translation (slide), reflection (flip) or rotation (turn) of a simple two- dimensional figure.<br><b>M3.C.2.1.2</b> Identify/draw a line of symmetry in a two- dimensional figure.<br><b>M3.C.2.1.3</b> Identify symmetrical two- dimensional shapes. |
|--|---|

V05 3-14

### M5.C Geometry

#### M5.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

|  |   |
|--|---|
| <b>M5.C.1.1</b> Define and/or use basic properties of quadrilaterals (parallelograms, squares, rectangles, trapezoids, rhombi), triangles, circles, pyramids, cubes, and/or prisms.<br><b>Reference:</b><br><b>2.9.5.B, 2.9.5.C,</b><br><b>2.9.5.F, 2.10.5.A</b> | <b>M5.C.1.1.1</b> Identify/classify/compare cubes, rectangular prisms and pyramids using faces, vertices and edges.<br><b>M5.C.1.1.2</b> Identify/classify/compare triangles and quadrilaterals according to sides (length, parallel or perpendicular) and angles.<br><b>M5.C.1.1.3</b> Identify and/or compare parts of right triangles, including right angles, acute angles, hypotenuse and legs.<br><b>M5.C.1.1.4</b> Identify and/or determine the measure of the diameter and radii of a circle (when one or the other is given). |
|--|---|

V05 5-16

### M5.C Geometry

#### M5.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

**M5.C.1.2** Represent and/or use properties of lines, line segments, rays, points and planes.  
  
**Reference:**  
**2.9.5.I**

**M5.C.1.2.1** Identify, draw and/or label points, lines, line segments, rays and planes.

V05 5-17

### M5.C Geometry

#### M5.C.2 Identify and/or apply concepts of transformations or symmetry.

**M5.C.2.1** Analyze transformations and/or use symmetry to analyze mathematical situations.  
  
**Reference:**  
**2.9.5.K,**  
**2.9.5.L**

**M5.C.2.1.1** Draw or identify a translation (slide), reflection (flip) or rotation (turn) of a 2-dimensional shape.

**M5.C.2.1.2** Draw or identify a maximum of 2 lines of symmetry in a two-dimensional figure.

V05 5-18

### M5.C Geometry

#### M5.C.3 Locate points or describe relationships using the coordinate plane

**M5.C.3.1** Identify, plot, or match points given an ordered pair.  
  
**Reference:**  
**2.8.5.H**

**M5.C.3.1.1** Locate, plot and/or identify points in Quadrant I and on the x and y axes of a grid (intervals of 1 - up to 20 by 20 grid).

V05 5-19

### M8.C Geometry

#### M8.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

**M8.C.1.1** Identify, name, and/or describe properties of quadrilaterals, triangles, circles, pyramids, cubes, prisms, spheres, cones and/or cylinders.  
  
**Reference:**  
**2.9.8.D**

**M8.C.1.1.1** Identify and/or describe properties of all types of quadrilaterals (parallelograms, squares, rectangles, trapezoids, rhombi).

**M8.C.1.1.2** Identify and/or describe properties of all types of triangles (scalene, equilateral, isosceles, right, acute, obtuse).

**M8.C.1.1.3** Identify and/or describe properties of cubes, pyramids, spheres, prisms, cones and cylinders.

V05 8-16

## M8.C Geometry

### M8.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

**M8.C.1.2** Compute measures of sides of right triangles using the Pythagorean Theorem.  
**Reference:**  
**2.10.8.A**

**M8.C.1.2.1** Use the Pythagorean Theorem to find the measure of a missing side of a right triangle (formula provided on the reference sheet – whole numbers only).

V05 8-17

## M8.C Geometry

### M8.C.2 Identify and/or apply concepts of transformations or symmetry.

**M8.C.2.1** Describe, analyze and/or draw translations, rotations (90, 180 and 360 degrees) and reflections.  
**Reference:**  
**2.9.8.H**

**M8.C.2.1.1** Draw or identify a rotation (turn) about the origin of a 2-dimensional shape on a grid.

**M8.C.2.1.2** Draw or identify a reflection (flip) over the axis of a 2-dimensional shape on a grid.

**M8.C.2.1.3** Draw or identify a translation (slide) of a 2-dimensional shape on a grid.

V05 8-18

## M8.C Geometry

### M8.C.3 Locate points or describe relationships using the coordinate plane.

**M8.C.3.1** Plot and/or identify ordered pairs on a coordinate plane.  
**Reference:**  
**2.8.5.H**

**M8.C.3.1.1** Plot, locate, or identify ordered pairs on a coordinate plane (the point may be a vertex of a polygon).

V05 8-19

## M11.C Geometry

### M11.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.

**M11.C.1.1** Identify and/or use parts of circles and segments associated with circles.  
**Reference:**  
**2.9.11.F**

**M11.C.1.1.1** Recognize or use the properties of a radius, diameter, chord, tangent and/or secant of a circle (given numbers should be whole).

**M11.C.1.1.2** Recognize or use the properties of arcs, semicircles, inscribed angles and/or central angles.

V05 11-13

**M11.C Geometry**

**M11.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.**

**M11.C.1.2** Recognize and/or apply properties of triangles and quadrilaterals.

**Reference:**  
**2.9.8.D,**  
**2.9.11.C**

**M11.C.1.2.1** Identify and/or use properties of triangles (e.g., medians, altitudes, angle bisectors, side/angle relationships).

**M11.C.1.2.2** Recognize and/or use properties of quadrilaterals (e.g., parallel sides, diagonals, bisectors, congruent sides and supplementary angles).

V05 11-14

**M11.C Geometry**

**M11.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.**

**M11.C.1.3** Use properties of congruence, correspondence and similarity in problem-solving settings involving two- and three-dimensional figures.

**Reference:**  
**2.9.11.B**

**M11.C.1.3.1** Recognize or use properties of congruent and similar polygons or solids.

V05 11-15

**M11.C Geometry**

**M11.C.1 Analyze characteristics and properties of two- and three- dimensional geometric shapes and demonstrate understanding of geometric relationships.**

**M11.C.1.4** Solve problems involving right triangles using the Pythagorean Theorem.

**Reference:**  
**2.10.11.B**

**M11.C.1.4.1** Find the measure of a side of a right triangle using the Pythagorean Theorem (Pythagorean Theorem included on the reference sheet).

V05 11-16

**M11.C Geometry**

**M11.C.2 Identify and/or apply concepts of transformations or symmetry.**

Not assessed at Grade 11.

V05 11-17

**M11.C Geometry**

**M11.C.3 Locate points or describe relationships using the coordinate plane.**

**M11.C.3.1** Solve problems using analytic geometry.

**Reference:**  
**2.9.11.G**

**M11.C.3.1.1** Find the distance and/or midpoint between 2 points on a number line or on a coordinate plane (formula provided on the reference sheet).

**M11.C.3.1.2** Relate slope to perpendicularity and/or parallelism (limit to linear algebraic expressions; slope formula provided on the reference sheet).