

## G Geometry

- **6.G.A Solve real-world and mathematical problems involving area, surface area, and volume.**
  - **6.G.A.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.**
    - [Understanding area of a parallelogram \(6-FF.3\)](#)
    - [Area of parallelograms \(6-FF.4\)](#)
    - [Understanding area of a triangle \(6-FF.5\)](#)
    - [Area of triangles \(6-FF.6\)](#)
    - [Understanding area of a trapezoid \(6-FF.7\)](#)
    - [Area of trapezoids \(6-FF.8\)](#)
    - [Area of rhombuses \(6-FF.9\)](#)
    - [Area of quadrilaterals \(6-FF.10\)](#)
    - [Area of compound figures \(6-FF.11\)](#)
    - [Area of compound figures with triangles \(6-FF.12\)](#)
  - **6.G.A.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas  $V = lwh$  and  $V = bh$  to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.**
    - [Volume of cubes and rectangular prisms \(6-FF.18\)](#)
    - [Volume of cubes and rectangular prisms with fractional side lengths \(6-FF.19\)](#)
    - [Volume of cubes and rectangular prisms: word problems \(6-FF.20\)](#)
  - **6.G.A.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.**
    - [Area and perimeter of squares and rectangles on the coordinate plane \(6-X.7\)](#)
    - [Graph triangles and quadrilaterals \(6-CC.8\)](#)
  - **6.G.A.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface areas of these figures. Apply these techniques in the context of solving real-world and mathematical problems.**
    - [Nets of three-dimensional figures \(6-EE.3\)](#)
    - [Surface area of cubes and rectangular prisms \(6-FF.21\)](#)
    - [Surface area of triangular prisms \(6-FF.23\)](#)
    - [Surface area of pyramids \(6-FF.24\)](#)