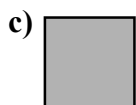
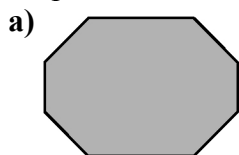


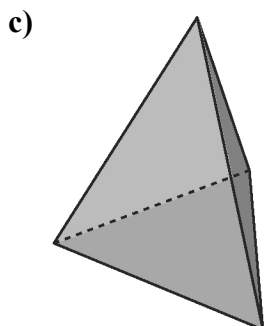
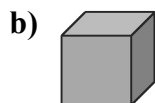
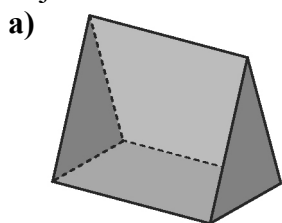
Prerequisite Skills

Geometric Shapes

1. Identify each two-dimensional geometric shape.



2. Identify each three-dimensional geometric object.



Perimeter and Area

3. Find the perimeter and the area of each geometric shape.
- a rectangular garden that measures 12 m by 40 m
 - an equilateral triangle with a side length of 32 cm and height of approximately 28 cm.
 - a circular cricket pitch with a radius of 25 m

Surface Area and Volume

- The exterior walls of a wooden barn need to be stained. The walls are 2.4 m high and the barn is a rectangle with side lengths 24 m by 18 m. What is the surface area of the exterior walls?
- What volume of water is needed to fill a pool with dimensions 6 m by 14 m by 2 m?
Hint: $1 \text{ m}^3 = 1000 \text{ L}$.

Angles in a Polygon

6. The sum of the interior angles in a polygon is given by the formula $S = 180(n - 2)$, where S is the sum of the angles and n is the number of sides of the polygon. Complete the table.

Regular Polygon	Sum of Interior Angles	Measure of Each Interior Angle
equilateral triangle		
square		
regular pentagon		
regular hexagon		
regular heptagon		
regular octagon		

Scale Factors

- The floor plan of a house shows a room as a rectangle with dimensions 12 cm by 20 cm. On the floor plan, 4 cm represents 1 m. What are the dimensions of the room?
 - On the floor plan, the garage is a square with side length 22 cm. What are the dimensions of the garage?