

Worksheet 1

Theme: Amusement Park Geometry

Name:

Class:



Section 1: Plotting the Park

Instructions: Use the coordinate grid to plot the four corners of the Ferris Wheel base.

Points: A(2, 1), B(6, 1), C(6, 5), D(2, 5)

Connect the points and name the figure.

Bonus: Find the area of the shape using the formula for a rectangle.



Section 2: Tilt-A-Whirl Triangle

Instructions: A triangular ride has sides measuring 8 m, 10 m, and 6 m.

1. Find the perimeter of the triangle.
2. Use Heron's formula to find the area.

Hint:

- Perimeter = sum of sides
- Area = $\sqrt{s(s-a)(s-b)(s-c)}$, where $s = \text{half the perimeter}$



Section 3: Volume of the Popcorn Stand

The popcorn stand is shaped like a rectangular prism (cuboid):

- Length: 5 m
- Width: 3 m
- Height: 2 m

Task: Find the **volume** of the stand.

Formula: $V = l \times w \times h$



Section 4: Circular Carousel

A carousel has a **radius of 4 meters**.

Find the **area** and **circumference** of the carousel.

Use $\pi \approx 3.14$.

- Area = πr^2
- Circumference = $2\pi r$



Design Challenge: Create your own ride using at least 2 shapes and label the dimensions.
Calculate either the area or volume of your design!