

**Math**

**Midpoint and  
Distance**

# Math

## Midpoint

$$(x_1 + x_2/2, y_1 + y_2/2)$$

## Distance

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

**Math**

**Quadratic  
Formula**

# Math

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

**Math**

**Circles**

# **Math**

## **Area of a Circle**

$$A = \pi \cdot r^2$$

## **Circumference of a Circle**

$$C = \pi \cdot d$$

# **Math**

## **Area of 2D figures**

# Math

## Area of a Square or Rectangle

$$A = lw$$

## Area of a Triangle

$$A = 1/2bh$$

## Area of a Trapezoid

$$A = \frac{b_1 + b_2}{2} \cdot h$$

**Math**

**Volume of 3D  
figures**

# **Math**

## **Volume of a Cube or Rectangular Prism**

$$V = lwh$$

## **Volume of a Triangle**

$$V = \text{area of base} \cdot \text{height} \cdot 1/3$$

## **Volume of a Sphere**

$$V = \frac{4}{3} \pi r^3$$

**Math**

**Rate Formula**

# Math

$$\text{rate} = \text{distance} \cdot \text{time}$$