Al Mawaheb School Mathematics Worksheet Grade 9 General

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GROUP : A

1. **GEOMETRY** The volume of a cylinder V is given by the formula $V = \pi r^2 h$, where r is the radius and h is the height.

   a. Solve the formula for h.

   b. Find the height of a cylinder with volume 2500π cubic feet and radius 10 feet.

2. **WATER PRESSURE** The water pressure on a submerged object is given by $P = 64d$, where P is the pressure in pounds per square foot, and d is the depth of the object in feet.

   a. Solve the formula for d.

   b. Find the depth of a submerged object if the pressure is 672 pounds per square foot.

3. **GRAPHS** The equation of a line containing the points $(a, 0)$ and $(0, b)$ is given by the formula $\frac{x}{a} + \frac{y}{b} = 1$.

   a. Solve the equation for y.

   b. Suppose the line contains the points $(4, 0)$, and $(0, -2)$. If $x = 3$, find y.

4. **GEOMETRY** The surface area of a rectangular solid is given by the formula $x = 2\ell w + 2\ell h + 2wh$, where ℓ = length, w = width, and h = height

   a. Solve the formula for h.

   b. The surface area of a rectangular solid with length 6 centimeters and width 3 centimeters is 72 square centimeters. Find the height.

LIVEWORKSHEETS