

Year 7 Weekly Tutorial - 07

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1. Solve the following equations.

a) $\frac{3x-2}{2} = 5$

c) $\frac{2x+1}{3} = \frac{x+3}{2}$

b) $\frac{3}{4}(x+2) = 9$

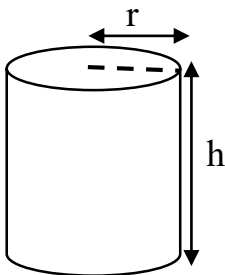
d) $\frac{3-2x}{2} = \frac{x-3}{3}$

2. Find y if $y = 3a^2 - 2b^2$, $a = -3$ $b = -4$

3. If $x = 5$, $y = -4$ and $w = \frac{x^2+y^2}{x-y}$, Find w .

4. Use the formula, $c = \frac{5}{9}(f - 32)$ to convert the temperature $21^\circ C$ in to temperature in Fahrenheit(F°).

5. The volume of a cylinder is given by the formula, $v = \pi r^2 h$



Find the height of the cylinder, if the volume of the cylinder is 264 cm^3 and radius is 7 cm .
(take $\pi = \frac{22}{7}$)

6. Solve the following inequalities. And show the solutions on a number line.

a) $2x + 5 > 9$

e) $2x + 3 > 3x + 5$

b) $3x - 3 < 12$

f) $3x + 1 > 4x - 2$

c) $2x - 4 > -8$

g) $2(x + 1) < x + 1$

d) $5x + 9 < -6$

h) $3(2 - x) > 5 - 3x$