

HOMEWORK: MATH INTERLUDES VI – SOLVING FORMULAS

Remember – neatness and completeness count. Also, you must show your work. The correct result without a sufficient amount of correct and appropriate work is worth zero points. Please remember to include this assignment in your Math Interludes Notebook.

- 1) Solve the given formula for the indicated variable. Show your work.

$$I = prt \text{ (solve for } r\text{)}$$

- 2) Solve the given formula for the indicated variable. Show your work.

$$V = \frac{4}{3}\pi \cdot r^3 \text{ (solve for } r^3\text{)}$$

- 3) Solve each of the following equations for y .

a) $4y + 12x = 24$

b) $6x - 3y = 12$

4) Solve for y : $\frac{y-a}{b} = x$

5) Given $z = \frac{x-\mu}{\sigma}$.

a) If $z = \frac{x-\mu}{\sigma}$, find x when $z = 7.9$, $\mu = 2.5$, and $\sigma = 6.0$

b) If $z = \frac{x-\mu}{\sigma}$, find x when $z = 1.85$, $\mu = 1.35$, and $\sigma = 2.4$

c) If $z = \frac{x-\mu}{\sigma}$, find x when $z = 4.2$, $\mu = 9.4$, and $\sigma = 1.7$

Math Interludes VI Homework:

1) $r = \frac{I}{pt}$

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

3a) $y = 6 - 3x$

3b) $y = -4 + 2x$

4) $y = a + bx$

5a) $z = 0.9$

5b) $x = 5.79$

5c) $x = 16.54$