

Algebra: Notation & Representation

1. Express the following statements algebraically

- Add 12 to twice of z .
- Subtract one-third of s from t .
- Divide k by m and multiply the result by 3.
- Twice x^2 minus 4 times the square root of y .
- The cube of the sum of $3m$ and $2n$ minus the square root when b is subtracted from m .

2. Write an algebraic expression for each of the following statements.

- The sum of three consecutive even numbers given that the first number is a .
- A car salesman receives a fixed salary of \$2500 each month. He gets a commission of \$450 for each car he sells. In a certain month, he sells n cars. How much is his salary for that month?
- Jepthah has \$170. He bought some T-shirts at \$25 each. If he has \$ p left, how many T-shirts did he buy?
- A car travels 210km in y hours. Write down, an expression for the average speed, in metres per second, of the train, giving your answer in its simplest form.

3. If $a = 3$, $b = -2$ and $c = 0$, find the value of

- $3a - b + 4c$
- $2b - c(b - 3a)$
- $\frac{2b - a}{b^2 - ac}$
- $a^2 + 2b^2 + c^2$

4. Given that $a = -\frac{1}{3}$, $b = \frac{1}{4}$ and $c = \frac{1}{2}$, evaluate the following

- $a - b + c$
- $-3abc$
- $\frac{b}{ac}$
- $b + 6(a - c)^2$

*Feel free to contact us at 9791 1234 or www.brainmatter.com.sg if you need the answer to these questions.