## Learning Goals

1. To understand what a term represents.
2. To understand what the degree of a relation means.
3. To understand what a coefficient represents.

## 2.1 - Representing Powers up to Degree 3

Algebraic Term - Part of an algebraic expression. The expression $2 x^{2}+3 x+4$ has three terms: $2 x^{2}, 3 x$, and 4 .

Degree - the largest exponent on a variable in an algebraic expression.

Coefficient - the number in front of the variable. For example, in the term $5 x$, the coefficient is 5 .

You can represent single variable terms with powers of 1, 2, or 3 using concrete materials or drawings. The degree of each term corresponds to the number of dimensions in the model.


## Example One

Joe doesn't understand the difference between 4 $t,(4 t)^{2}$ and $(4 t)^{3}$. How could you show Joe, with pictures, the difference?

$(44)^{3}$


Example Two
A square wall tile has an area of $116 \mathrm{~cm}^{2}$. Determine the length of its side to two decimal places.


$$
\begin{aligned}
A & =1 \times w \\
& =5 \times 5 \\
\sqrt{116} & =\sqrt{S^{2}} \\
10.77 & =5
\end{aligned}
$$

$\therefore$ the side length is 10.77 cm .

Complete: p. 80-82\#1, 2, 4a, 5, 7.

