

# Unit Review

## What Do I Need to Know?

- ✓ A whole number is divisible by:
- 2 if the number is even
  - 3 if the sum of the digits is divisible by 3
  - 4 if the number represented by the last 2 digits is divisible by 4
  - 5 if the ones digit is 0 or 5
  - 6 if the number is divisible by 2 and by 3
  - 8 if the number represented by the last 3 digits is divisible by 8
  - 9 if the sum of the digits is divisible by 9
  - 10 if the ones digit is 0
- A whole number cannot be divided by 0.

- ✓ A *variable* is a letter or symbol.  
It represents a set of numbers in an *algebraic expression*.  
A variable can be used to write an algebraic expression:  
"3 less than a number" can be written as  $n - 3$ .

A variable represents a number in an *equation*.  
A variable can be used to write an equation.  
"4 more than a number is 11" can be written as  $x + 4 = 11$ .

- ✓ An algebraic expression can be *evaluated* by substituting a number for the variable.  
 $6r + 3$  when  $r = 2$  is:  $6 \times 2 + 3 = 12 + 3$   
 $= 15$

- ✓ A *relation* describes how the output is related to the input.  
A relation can be displayed using a table of values or a graph.  
When points of a relation lie on a straight line, it is a *linear relation*.

- ✓ An equation can be solved using tiles.