Chapter 1 section 5
Order of Operations

The sentence: John said Mary can run.
Needs punctuation. Put in.

Who can run?

Punctuation is very important since the meaning of a sentence can be interpreted many ways.
As with English, mathematics also has punctuation.

Order of operation.
why have it?

$4 + 3 \bullet 2$

Grouping symbols – parentheses, brackets, curly braces
$(4 + 3) \bullet 2$ $[4 + 3] * 2$ $\{4 + 3\} * 2$

Exponents

Multiplication, division in order from left to right

Addition, subtraction in order from left to right

$12 + 4 \bullet 2 - 3$

Example 1: page 65
Evaluate: $4 + 3 \bullet 2$

Example 3
Evaluate: $54 \div 9 \bullet 2$

Example 5: page 66
Evaluate: $12 + 2(3 + 2 \bullet 5)^2$

Example 7: page 67
Evaluate: $\dfrac{6^2+8^2}{(2+3)^2}$

Distributive Property
$a \bullet (b - c) = a \bullet b - a \bullet c$

Example 10: page 70

$3 \bullet (12 - 8)$