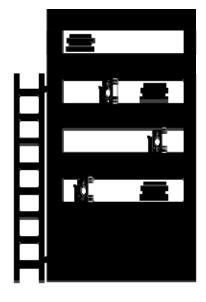
## Scientific Notation Multiplication and Division - Step-by-Step Lesson

Find the product.

$$(6.8 \times 10^2) (11.5 \times 10^3)$$



## **Explanation:**

$$(6.8 \times 10^2) (11.5 \times 10^3)$$

Separate the problem into its two components.

a) Constants b) Powers of ten

=(6.8 
$$\times$$
 11.5) (10<sup>2</sup>  $\times$  10<sup>3</sup>) multiply the constants.

= 
$$78.2 \times 10^{2+3}$$
 multiply the powers of ten by adding them.

= 
$$78.2 \times 10^5$$
 Writing the number in proper scientific form.

$$= 7.82 \times 10^6$$