**Unit 1: Expressions and Exponents**

**Powers and Exponents**



 **In the United States, nearly 8 • 109 text messages are sent every month. About how many text messages is this?**

8 ∙ 109 = 8 ∙ 1,000,000,000 Evaluate 8 ∙ 109.

= 8,000,000,000 or 8 billion

 So, about 8 billion text messages are sent every month in the United States.



 **Evaluate *g*5 – *h*3 if *g* = 2 and *h* = 7.**

*g*5 − *h*3 = (2)5 − (7)3 Replace *g* with 2 and *h* with 7.

 = 2 × 2 × 2 × 2 × 2 − 7 × 7 × 7 Write the powers as products.

 = 32 − 343 Multiply.

 = −311 Add.