**Chapter 1: Expressions and Exponents**

**Learning Target 2 and 3 Multiply and Divide Monomials (Laws of Exponents)**



 **Simplify using the Laws of Exponents.**

 = ∙ Group by common base.

= 2 ∙ *t*4 – 1  Divide. Subtract the exponents.

 = 2 ∙ *t*3 or 2*t*3  Simplify.



 **The processing speed of a certain computer is 1011 instructions per second. Another computer has a processing speed that is 103 times as fast. How many instructions per second can the faster computer process?**

To find the processing speed, multiply 1011 by 103.

1011 ∙ 103 = 1011 + 3  Add the exponents.

=1014 Simplify.