1. Rewrite each product using exponents
	1. 6\*6\*6\*6\*6=
	2. 2\*2\*10\*10\*10=
2. Find all the factors of 57
3. Indicate whether each number is prime or composite
	1. 23
	2. 38
4. Write the prime factorization of
	1. 42=
	2. 54=
5. For the expression, $15x^{3}+20xy^{4}$, fill in the blanks with the appropriate word(s) from the list below.

Coefficient, Factor, Multiple, Term, Prime, Composite

* 1. $15x^{3}$ and $20xy^{4}$ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the expression.
	2. $5x$ is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the expression.
	3. 15 is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ number.
	4. 15 is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of 

**Thinking Ahead about Fractions** – You should understand these questions fully before the next class. Check your answers with the key on your instructor’s website. You can get help with this work from the following sources:

* Visit your instructor during office hours
* Go to the Algebra Alcove
* Use the following resources on the Internet:
* Website: <http://www.mathsteacher.com.au/year8/ch02_fracdec/01_frac/frac.htm>
1. Write “*numerator”* and *“denominator”* in the correct places in the fraction below*.*

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Complete each statement below with the appropriate symbol: > (greater than), < (less than), =. Note: After this assignment, you will be expected to recognize and understand the > and < symbols.
	1. $\frac{12}{19 }$ \_\_\_\_\_\_\_\_\_\_\_\_ 1
	2. $\frac{14}{14}$ \_\_\_\_\_\_\_\_\_\_\_\_\_ 1
	3. $\frac{7}{3}$ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1
2. Write a fraction that is greater than 1 with a denominator of 6. \_\_\_\_\_\_
3. Write a fraction that is equal to 1 with a denominator that is a factor of 32. \_\_\_\_\_\_
4. Write a fraction this less than 1 with a denominator that is a multiple of 4. \_\_\_\_\_\_
5. Explain how you can tell if a fraction is greater than, less than or equal to 1. Use complete sentences and the appropriate vocabulary of numerator and denominator.
6. Write the number *4*  as a fraction:
7. The fraction $\frac{12}{19 }$ could be written as …(Circle the best answer.)
8. 12 x 19
9. 19 x 12
10. 19 ÷ 12
11. 12 ÷ 19
12. None of the above.

**Thinking Back**

Simplify the following expressions

|  |  |
| --- | --- |
| 1.
 | 1.
 |



**Brain-Based Reading II Written Assignment**

**Answer the following questions based on the information in the reading.**

1. Summarize what the author means by the phrase, “Not Too Hot – Not Too Cold, But Just Right.”
2. Select one of the questions at the beginning of the reading to answer here.
3. Quote at least one finding described in the reading from studies on sleep and learning.