## **New Practice: Exponents III**

1. Simplify each expression completely, leaving no negative exponents.

a.

$$\frac{a^{-7}b^{2}}{4a^{3}c^{-4}}$$

b.

$$\left(\frac{6x^{-1}}{y^{-3}}\right)^2$$

C.

$$(3x^2y)^3(2xy)$$

d.

$$-\left(\frac{5a^{10}}{3b^6}\right)^{-3}$$

e.

$$\frac{-5y^2}{-15xy^4}$$

f

$$5x^4(-2x^0y + 3x^3y^2)$$

2. Circle the three expressions that *cannot* be simplified.

a.	$a^2(-a^3)$	b. $2x^4 + 6xy^4$	c. $4x(3xy^2)$
d.	$(a^4)(b^2)$	e. $\frac{x^3}{-3y^2}$	f. $4a^3b^0 + a^{-8}$

3. Complete the table

	Standard Notation	Scientific Notation
a.	0.000058	
b.	0.0000003	
C.		6.2 x 10 <sup>-5</sup>
d.		2.0 x 10 <sup>-7</sup>

Use the rules of exponents to simplify. Show appropriate work. Answers should be in scientific notation

4. 
$$\frac{(2.3\times10^{-3})(4.2\times10^{9})}{8.7\times10^{3}}$$

5. 
$$\frac{\left(3.5 \times 10^4\right) \left(1.2 \times 10^{-1}\right)}{\left(2.4 \times 10^{-2}\right)}$$

## Thinking Back: Foundational Skills Review on Solving Equations

Solve #6-9.

301VE #0-3.	
6. $2x - 1 = 5$	7. $1 - \frac{t}{4} = -2$
$-11 = \frac{2n}{3} - 7$ 8.	9. $6 - 3x = 9$

Answer each question based on information from the *Studying and Learning Math* reading or from previous Brain-Based Learning readings.

10. Briefly summarize (one sentence for each) the three ways in which learning math presents unique challenges to some people.

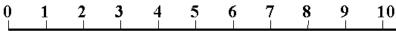
11. Based on Spitzer's research,	what should you d	lo to help remember	material from
class?			

12. Statements about the story of Ed and Nick are given below. Indicate if each is true (T) or False (F).  Ed and Nick found that
They needed to spend more time studying to learn math.
Shorter studying blocks were more effective than longer blocks.
They weren't smart enough to do math.
They did better on tests if they studied several hours the night before.
Taking breaks during studying helped them learn better.
13. On the line below, indicate how <b>important</b> it is to you to study for this class (with 10

Why did you choose this number and not a lower number?

being the highest).

14. On the line below, indicate how **confident** are you that know how to study for this class (with 10 being the highest).



Why did you choose this number and not a lower number?

TRS 92 Day 7 Homework

15. Reference information from **at least two** of the readings to answer this question: how do using physical objects like the factor tiles support learning?