Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Formative Scores: #1: \_\_\_\_\_ #2:\_\_\_\_\_ #3:\_\_\_\_\_ #4:\_\_\_\_\_ #5:\_\_\_\_\_ #6:\_\_\_\_\_

**HW #8**

Simplify the exponential expressions.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. $\left(s^{4}tu^{2}\right)\left(s^{7}t^{-1}\right)$
 | 1. $64^{^{1}/\_{2}}$
 | 1. $10^{^{4}/\_{3}}$
 | 1. $\left(x^{2}y^{3}\right)\left(x^{-2}y^{-2}\right)$
 |
| 1. $64^{^{2}/\_{3}}$
 | 1. $\frac{14a^{3}b^{2}}{21a^{4}b}$
 | 1. $\frac{4x^{18}}{\left(2x^{22}\right)^{0}}$
 | 1. $81^{^{7}/\_{4}}$
 |
| 1. $2m^{3}n^{2}∙3mn^{4}$
 | 1. $25^{^{5}/\_{2}}$
 | 1. $\frac{x^{3}y^{4}}{x^{2}y^{3}}$
 | 1. $\left(3w^{-2}\right)^{4}$
 |

1. Complete the diamond problems.



1. Solve the absolute value equation.

$$\left|2x-3\right|=23$$

1. Write the equation of the line that passes through the points $\left(-4, -11\right) and \left(-3, -9\right).$
2. Multiply using a generic rectangle. Then write the area as a product of the dimensions equal to the sum of the parts.

$$\left(2x+1\right)\left(3x+4\right)$$

1. Graph the system of inequalities. Make sure to shade the correct solution region.



$$2x+3y <12$$

$$3x+2y >12$$

**DELIBERATE PRACTICE**

|  |  |
| --- | --- |
| LT and Prob # | Work |
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|  |  |