Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block\_\_\_\_\_\_

Algebra I – Quadratic Emphasis

7.1-7.4 Review

I. Simplify. Write answers in exponential form. (No decimals and no negative exponents!)

|  |  |  |
| --- | --- | --- |
| 1.
 | 1.
 | 1.
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| 1.
 | 1.
 | 6.  |
| II. Evaluate. No decimals and no negative exponents! |  |
| 1.
 | 1.
 | 1.
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| 1.
 | 1.
 |  |

III. Word problems.

1. The area of a trapezoid can be found using the formula , where *h* is the height of the trapezoid and *b*1 and *b*2 are the bases of the trapezoid.

What is the area of a trapezoid with height 18*xy*5 cm, a base 4*x*4 cm, and another base 6*x*4 cm?

I. Simplify. Write answers in exponential form. (No negative exponents!)

|  |  |  |
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| 1.
 | 1.
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II. Word problems.

1. The area of a rectangle is 28*x*5*y*3. The length of the rectangle is 7*xy*2. What is the width of the rectangle?

22. A rectangle has a length of 6x4 and a width of 3x7. Write two separate formulas for the area of the rectangle and for the perimeter of the rectangle. Simplify each.

1. The radius of Mars is about 3.4 × 103 km. What is the approximate surface area of Mars? (Hint: *S.A.* = 4*πr*2) WRITE YOUR ANSWER IN SCIENTIFIC NOTATION. Use π = 3.14