Algebra I

Name_____

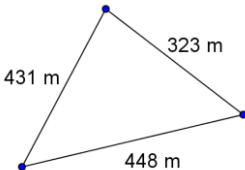**Mental Math Pre-test**   **Date:** _____

Directions: Do your best. Attempt to find each answer in your head. No calculators allowed.

1) $(-233) + (-140) = $ _____

2) Solve $400 = 88 + x$. _____

3) Simplify $9 \times 5 \times 6 \times 2 = $ _____

4) Solve $48 = \frac{r}{2}$ _____

5) The five busses had the following number of students: 39, 39, 41, 43, 41. Estimate the total number of students. _____

6) Simplify $z^{16} \cdot z^{39}$ _____

7) $x = $ weight of the item to be shipped, in pounds
   $S = $ cost, in dollars, to ship the item
   $S = 30x$.
   If the shipping cost is $1200, find the weight of the item. _____

8) Simplify $y^{65} \cdot y^{15}$ _____

9) Ross's new car cost him $3260. If he pays for it with 4 equal monthly payments, how much money is one payment? _____

10) Estimate the perimeter of the triangle. _____

11) $m(t) = \frac{104.1}{t}$ find $m(1.041)$ _____

12) Simplify $\sqrt{x^{98}}$ _____

13) If there is a 10% tourism tax on hotel rooms, what is the tourism tax if the hotel room costs $95.80? _____

14) Solve $\frac{x}{4} = 14.2$ _____

15) Evaluate $\frac{x}{y}$ if $x = 46$ and $y = 4$. _____