Algebra 1 Name_____

Complex Notation Equations Bonus

Date_____ Period____

Solve each Complex Distribution Equation for 'x.' Answer to the nearest hundredth.

1) EXAMPLE: $\frac{66}{20} + 3.2x + |-19.4| = 3.3^4 + \sqrt{51.5}$

I simplify every term in the first step:

dividing for the fraction,
making the absolute-value positive,
raising 3.3 to the fourth power,
taking the square-root to a decimal.

$3.3 + 3.2x + 19.4 = 118.59 + 7.18$ Every term is simplified.

$3.2x + 22.7 = 125.77$ I combine like-terms.

$-22.7 \quad -22.7$ I subtract to get rid of the add.

$3.2x = 103.07$

$/3.2 \quad /3.2$ I divide to get rid of the multiply.

$x = 32.21$

2) $8.2x + \sqrt{73.5} = 4.1^3$

3) $15.7x = \frac{967}{45} + |-23.9|$

4) $19.7x - |-3.6| = \frac{414}{59}$

5) $7.2x = \sqrt{79.5} + 4.7^3$

6) $5.4x + 7.1^2 = \sqrt{129} + |-41.5|$

7) $\frac{2278}{34} = |-118.4| - \sqrt{38.2} + 2.8x$

8) $2|34.5| - 3x = 1.8^7 + \frac{69}{14}$

9) $\frac{94.4}{6.3} + 12.1^2 = \sqrt{771} + 7.2x$

10) $19.56x + \frac{35}{15} + 8.4^2 = \sqrt{414} + |-31.2|$

11) $6.1^4 + 2x + \sqrt{137.6} = \frac{543}{27} + 9.4x - |-58|$