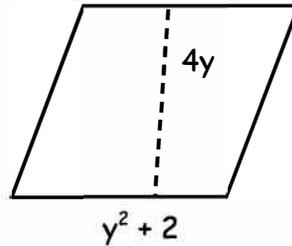# Sample Lesson #2

1.   Factor. $y^2 - 16y + 64$

2. $-3(-8)(2) = ?$

3.   Multiply. $(5a^3 - 2a^2 + 4)(a - 6)$

4.   Solve for x. $\dfrac{3}{8} = \dfrac{x}{120}$

5.   Find the area of the parallelogram.

6. $239 + (-99) = ?$

7.   Simplify. $4\sqrt{18a^{17}b^{15}}$

8. $50 - 4 \cdot 5 + 6 \div 2 - 1 = ?$

9.   Solve for x. $\dfrac{8}{9}x - \dfrac{7}{9}x + 4 = 12$

10.   Terri bought headphones for \$99. The sales tax was 8%. What was the total cost of the headphones?

11.   Multiply the rational expression. $\dfrac{x^2 + 7x + 12}{x + 5} \cdot \dfrac{5x + 25}{x + 4}$

12.   Write an algebraic phrase that means *twice a number increased by four.*

13.   Find the LCM of $10x^3 y^2 z^4$ and $18x^2 yz^2$.

14.   70% of what number is 63?

15.   Factor out the GCF. $5x - 20$

16.   Solve for y. $|y - 3| = 7$

17.   Solve for m. $14 - 9m = -11m$

18.   Simplify. $(x^{-8} y^{-5})(x^{10} y^{-2})$

19.   Write 52,000,000 in scientific notation.

20.   Find the sum. $\begin{array}{r} 15x^2 - 7x + 3 \\ + \quad 8x^2 \qquad - 5 \\ \hline \end{array}$

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.