

1. Simplify:  $8a^4b^3(2a^3b^2)^3$

2. Simplify:  $\frac{9x^5y^7z^4}{15x^8y^3z^4}$

3. Multiply:  $(5x-3)(-4x+11)$

4. Factor:  $9x^2 - 49$

5. Factor:  $4x^2 + 4x - 15$

6. Factor:  $16x^2 - 24x + 9$

7. Factor completely:  $12a^3 + 28a^2 + 8a$

8. Multiply:  $\frac{x^2 - 2x - 15}{x^2 - 25} \cdot \frac{x^2 + 9x + 20}{x^2 - x - 6}$

9. Subtract:  $\frac{2x-3}{x^2-x-30} - \frac{x-8}{x^2-x-30}$

10. Add:  $\frac{2a+3}{a^2-7a+12} + \frac{3}{a-4}$

11. Find the solutions:  $x^2 - 6x - 18 = 0$

12. Use completing the square to solve:  
 $x^2 - 10x = -12$

13. Quadratic Formula:  $2x^2 - 4x - 2 = 0$     14. Graph and find the x and y-intercepts of  
 $y = x^2 - 3x - 10$ .

