

SCORE: _____ / 6 POINTS

ONLY FINAL ANSWERS IN THE SPACES PROVIDED WILL BE GRADED
NO CREDIT IF I CANNOT UNDERSTAND WHAT YOUR FINAL ANSWER IS

**FINAL ANSWERS
ONLY ↓**

[1] Simplify.

$$\frac{16 - x^2}{x^2 + 3x - 28}$$

$$-\frac{x+4}{x+7}$$

[2] Multiply and simplify.

$$\frac{x^2 + 4x}{x^2 - 36} \cdot \frac{x^2 - 4x - 12}{x^2 + 6x + 8}$$

$$\frac{x}{x+6}$$

[3] Multiply and simplify.

$$\frac{3x^2 - 17x - 6}{x^2 - 4x - 12} \cdot \frac{4x^2 + 5x - 6}{9x^2 + 15x + 4}$$

$$\frac{4x-3}{3x+4}$$

[4] Divide and simplify.

$$\frac{x^2 + 5x - 14}{x^2 - 2x - 8} \div \frac{x^2 - 8x + 12}{x^2 - x - 12}$$

$$\frac{(x+7)(x+3)}{(x+2)(x-6)}$$

[5] Divide and simplify.

$$\frac{2x^2 - 12x + 18}{-3x^2 - 6x + 9} \div \frac{4x^2 - 4x - 24}{9x^2 + 27x + 18}$$

$$\frac{-3(x-3)(x+1)}{2(x+3)(x-1)}$$

[6] Divide and simplify.

$$\frac{30 - 45x}{28x + 14} \cdot \frac{75x - 50}{12 + 24x}$$

$$\frac{-18}{35}$$