

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.

$$\frac{9 - x^2}{x^2 + 3x - 18}$$

[2] Multiply and simplify.

$$\frac{x^2 + x - 6}{x^2 + 9x + 18} \cdot \frac{x^2 + 6x}{x^2 - 4}$$

[3] Multiply and simplify.

$$\frac{3x^2 - x - 4}{x^2 - 5x - 6} \cdot \frac{4x^2 - 23x - 6}{6x^2 + x - 12}$$

[4] Divide and simplify.

$$\frac{x^2 + 7x - 8}{x^2 + 2x - 15} \div \frac{x^2 + 5x - 6}{x^2 + 3x - 10}$$

[5] Divide and simplify.

$$\frac{2x^2 + 4x - 48}{-3x^2 - 15x + 18} \div \frac{4x^2 - 4x - 8}{9x^2 - 18x + 9}$$

[6] Divide and simplify.

$$\begin{array}{r}
 42x + 28 \\
 \hline
 45 - 30x \\
 \hline
 12 + 36x \\
 \hline
 50x - 75
 \end{array}$$

$$\frac{x}{x+2}$$

$$\frac{(x+8)(x-2)}{(x-3)(x+6)}$$

$$\frac{-3(x-4)(x-1)}{2(x-2)(x+1)}$$