

YOUR NAME: \_\_\_\_\_

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. Perform the division and simplify:

$$\frac{x^2 - 9}{x^2 + 2x - 3} \div \frac{7x - 21}{5x - 5} =$$

2. Add the two rational expressions:

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