

Please show **all** your work for the short answer questions! Answers without supporting work will not be given full credit. Each multiple choice question is worth 2 points. Circle only one answer.

Name: \_\_\_\_\_

1. (6 points) Simplify and state all restrictions

(a)  $\frac{7x}{7x - 21}$

(b)  $\frac{3x^2 - 5t - 12}{2x^2 - 6x}$

2. (5 points) Simplify and state the restrictions.

$$\frac{x^2 - 3x + 2}{x^2 + 3x - 4} \times \frac{x^2 + 9x + 20}{x^2 + x - 6}$$

3. (3 points) Simplify and state restrictions.

$$\frac{\frac{2xy}{5x^2y^2}}{\frac{10x^2y}{15y}}$$