RATIONAL EXPRESSIONS MATH 73

LAST NAME	FIRST NAME	DATE

1 (2 points). Perform the operation and simplify if possible:

$$\frac{x^2 + 5x + 4}{x^2 - 6x + 8} \cdot \frac{x^2 + 5x - 14}{x^2 + 8x + 7}$$

2 (2 points). Perform the operation and simplify if possible:

$$\frac{x^2 + 14x + 49}{x - 3} \div \frac{x^2 + 3x - 28}{x - 4}$$

3 (2 points). Perform the operation and simplify if possible:

$$\frac{x}{x^2 + 5x + 6} - \frac{2}{x^2 + 3x + 2}$$

4 (2 points). Perform the operation and simplify if possible:

$$\frac{4}{4 - 2a} - \frac{1}{a - 2}$$

5 (2 points). Simplify the complex fraction:

$$\frac{\dfrac{2}{5} - \dfrac{1}{10}}{\dfrac{7}{20} - \dfrac{4}{15}}$$

6 (2 points). Simplify the complex fraction and state the answer as a rational expression:

$$\frac{s + \dfrac{2}{s}}{s - \dfrac{3}{s}}$$

7 (2 points). Simplify the complex fraction and state the answer as a rational expression:

$$\frac{\dfrac{5}{4x^3} - \dfrac{5}{4x}}{\dfrac{3}{2x} + \dfrac{6x+3}{2x^3}}$$