Student: _____ **Date:** _____ **Time:** _____	**Instructor:** Fred Khoury **Course:** Math 2312-1000 Precalculus (Fall - 2015) **Book:** Lial: College Algebra and Trigonometry, 4e	**Assignment:** Quiz Sec 4.8

1. Find the partial fraction decomposition for the rational expression.

$$\frac{8x-47}{(x+2)(x-5)}$$

A. $\frac{9}{x+2}-\frac{1}{x-5}$

B. $\frac{8}{x+2}-\frac{47}{x-5}$

C. $\frac{1}{x-5}-\frac{9}{x+2}$

D. $\frac{9}{x+2}+\frac{1}{x-5}$

2. Find the partial fraction decomposition for the rational expression.

$$\frac{11x-43}{x^2-7x+10}$$

A. $\frac{1}{x-2}+\frac{1}{x-5}$

B. $\frac{7}{x-2}+\frac{4}{x-5}$

C. $\frac{7}{x+2}+\frac{4}{x+5}$

D. $\frac{4}{x-2}+\frac{7}{x-5}$

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3. Find the partial fraction decomposition for the rational expression.

$$\frac{4x^2 + 2x + 42}{(x^2 - 49)(x - 1)}$$

A. $\frac{5}{x-7} + \frac{3}{x+7} - \frac{2}{x-1}$

B. $\frac{2}{x-7} + \frac{3}{x+7} + \frac{1}{x-1}$

C. $\frac{5}{x^2-49} - \frac{1}{x-1}$

D. $\frac{3}{x-7} + \frac{2}{x+7} - \frac{1}{x-1}$

4. Find the partial fraction decomposition for the rational expression.

$$\frac{-2x^2 + 9x + 44}{(x+4)^2(3x+4)}$$

A. $\frac{4}{3x+4} - \frac{3}{(x+4)^2} - \frac{2}{x+4}$

B. $\frac{4}{3x+4} + \frac{3}{(x+4)^2} + \frac{2}{x+4}$

C. $\frac{4}{3x+4} - \frac{2}{x+4} + \frac{3}{(x+4)^2}$

D. $\frac{4}{3x+4} + \frac{2}{(x+4)^2} - \frac{3}{x+4}$

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5. Find the partial fraction decomposition for the rational expression.

$$\frac{4x^3 + 8x^2 - 6x + 2}{2x^2 - x - 1}$$

A. $2x - 5 - \frac{13}{2x + 1} + \frac{7}{x - 1}$

B. $2x - 5 - \frac{5}{6x + 3} + \frac{1}{3x - 3}$

C. $2x + 5 - \frac{13}{6x + 3} + \frac{8}{3x - 3}$

D. $2x + 5 - \frac{7}{6x + 3} + \frac{13}{3x - 3}$