

| Final Exam Practice Sheet #2 | Answers |
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| Solve for x: $\frac{2}{x+3} - \frac{5}{x+2} = \frac{7}{x^2+5x+6}$ | $x = -6$ |
| Solve for x: $3 < -2x + 1 \leq 11$ | $[-5, -1)$ |
| After completing the square the quadratic equation $x^2 + 10x + 2 = 0$ is equivalent to _____. | $(x + 5)^2 = 23$ |
| Simplify: $\sqrt[3]{\frac{27x^{24}}{y^{12}}}$ | $\frac{3x^8}{y^4}$ |
| Evaluate: $27^{-\frac{2}{3}}$ | $\frac{1}{9}$ |
| Subtract: $3\sqrt{20} - 2\sqrt{45}$ | 0 |
| Divide: $\frac{\sqrt{50x^{12}}}{\sqrt{2x^4}}$ | $5x^4$ |
| Simplify: $\frac{\frac{3}{5x} - \frac{2}{7}}{4 + \frac{7}{5x}}$ | $\frac{-7}{20x + 7}$ |
| Add: $\frac{2}{x^2+3x} + \frac{x}{x^2+5x+6}$ | $\frac{x^2 + 2x + 4}{x(x + 3)(x + 2)}$ |
| Subtract: $\frac{2}{x-3} - \frac{5}{3-x}$ | $\frac{7}{x - 3}$ |