

## 9-2 Simplifying Rational Expressions

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

Time> Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Time = \_\_\_\_\_

Simplify each expression.

\_\_\_\_\_ 1.  $\frac{10x^3}{15x^5}$

\_\_\_\_\_ 2.  $\frac{14x^3}{16x^2}$

\_\_\_\_\_ 3.  $\frac{12a^2b^3}{16a^5b}$

\_\_\_\_\_ 4.  $\frac{a^2b^4c^3}{3a^2bc^6}$

\_\_\_\_\_ 5.  $\frac{10x^{300}}{15x^{298}}$

\_\_\_\_\_ 6.  $\frac{4x^{130}}{2x^{125}}$

\_\_\_\_\_ 7.  $\frac{10x^3}{10x^2 + 5x}$

\_\_\_\_\_ 8.  $\frac{2x}{6x^3 + 2x}$

\_\_\_\_\_ 9.  $\frac{6x^2}{9x^3 + 18x^2}$

\_\_\_\_\_ 10.  $\frac{4x^3}{2x^2 + 10x}$

\_\_\_\_\_ 11.  $\frac{n+3}{n^2+7n+12}$

\_\_\_\_\_ 12.  $\frac{n-1}{n^2+5n-6}$

\_\_\_\_\_ 13.  $\frac{n^2+6n+8}{n^2+7n+10}$

\_\_\_\_\_ 14.  $\frac{n^2-5n+6}{n^2+4n-21}$

\_\_\_\_\_ 15.  $\frac{n^2-16}{n^2+9n+20}$

\_\_\_\_\_ 16.  $\frac{4n^2-25}{n^2+9n+10}$

\_\_\_\_\_ 17.  $\frac{n^3+n^2-6n}{n^3+8n^2+15n}$

\_\_\_\_\_ 18.  $\frac{2n^3+14n^2+20n}{4n^3+20n^2+24n}$