

NAME _____

Module 12 Simplifying Algebraic Expressions by Factoring Polynomials
Lesson 7 Dividing Polynomials Using Factoring

additional practice

Simplify by factoring.

- $\frac{b^2 - 8b - 20}{b + 2} \underline{\hspace{2cm}}$ **$b - 10$**
- $\frac{d^2 - 17d + 72}{d - 9} \underline{\hspace{2cm}}$ **$d - 8$**
- $\frac{x^2 - 12x + 27}{x - 3} \underline{\hspace{2cm}}$ **$x - 9$**
- $\frac{k^2 - 64}{k + 8} \underline{\hspace{2cm}}$ **$k - 8$**
- $\frac{3d^2 + 9d - 30}{d - 2} \underline{\hspace{2cm}}$ **$3(d + 5)$ or $3d + 15$**
- $\frac{9y^2 + 30y + 25}{3y + 5} \underline{\hspace{2cm}}$ **$3y + 5$**
- $\frac{4r^2 - 8r - 252}{4r + 28} \underline{\hspace{2cm}}$ **$r - 9$**
- $\frac{4x^2 + 36x + 80}{4x + 20} \underline{\hspace{2cm}}$ **$x + 4$**
- $\frac{3c^2 - 2c - 8}{4c - 8} \underline{\hspace{2cm}}$ **$\frac{3c + 4}{4}$**
- $\frac{2k^2 - 5k - 7}{2k + 2} \underline{\hspace{2cm}}$ **$\frac{2k - 7}{2}$**
- $\frac{5j^2 - 27j - 18}{3j - 18} \underline{\hspace{2cm}}$ **$\frac{5j + 3}{3}$**
- $\frac{4x^2 - 9}{6x - 9} \underline{\hspace{2cm}}$ **$\frac{2x + 3}{3}$**
- $\frac{f^2 + 7f + 6}{f + 6} \underline{\hspace{2cm}}$ **$f + 1$**
- $\frac{p^2 + 5p - 50}{p - 5} \underline{\hspace{2cm}}$ **$p + 10$**
- $\frac{r^2 + 20r + 100}{r + 10} \underline{\hspace{2cm}}$ **$r + 10$**
- $\frac{n^2 - 20n + 96}{n - 8} \underline{\hspace{2cm}}$ **$n - 12$**
- $\frac{6z^2 + 29z + 28}{2z + 7} \underline{\hspace{2cm}}$ **$3z + 4$**
- $\frac{2b^2 - 45b + 100}{b - 20} \underline{\hspace{2cm}}$ **$2b - 5$**
- $\frac{3a^2 + 18a + 24}{3a + 6} \underline{\hspace{2cm}}$ **$a + 4$**
- $\frac{5t^2 - 40t - 165}{5t + 15} \underline{\hspace{2cm}}$ **$t - 11$**
- $\frac{3h^2 - 11h - 20}{2h - 10} \underline{\hspace{2cm}}$ **$\frac{3h + 4}{2}$**
- $\frac{4x^2 + 7x - 2}{4x + 8} \underline{\hspace{2cm}}$ **$\frac{4x - 1}{4}$**
- $\frac{12x^2 + 28x + 15}{6x + 9} \underline{\hspace{2cm}}$ **$\frac{6x + 5}{3}$**
- $\frac{16m^2 - 49}{12m - 21} \underline{\hspace{2cm}}$ **$\frac{4m + 7}{3}$**

