

4.3 Practice A

1. $x + 6 + \frac{42}{x - 5}$

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

3. $x + 1 + \frac{3}{x^2 - 9}$

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

5. $x + 9 + \frac{28}{x - 3}$

6. $3x - 8 - \frac{12}{x - 1}$

7. $2x - 5 + \frac{15}{x + 2}$

8. $x^2 - 3x + 7 - \frac{15}{x + 3}$

9. $x + 5 + \frac{50}{x - 5}$

10. $5x + 2 + \frac{4}{x - 1}$

11. $k = -3$;

$$\begin{array}{r|rrrr} -3 & 1 & 2 & 0 & 7 \\ & & -3 & 3 & -9 \\ \hline & 1 & -1 & 3 & -2 \end{array}$$

$$\frac{x^3 + 2x^2 + 7}{x + 3} = x^2 - x + 3 - \frac{2}{x + 3}$$

12. 28 13. 41 14. 8 15. 18

16. $x^3 + x^2 - 3x + 3$; Multiply the result by $x + 1$.