LESSON 85 ANSWERS

1. $\frac{6}{3} \cdot x^{5-1} = 2x^4$

2. $\frac{12}{-2} \cdot x^{6-2} = -6x^4$

3. $\frac{15x^2}{5x} - \frac{10x}{5x} = 3x - 2$

4. $\frac{9x^4}{x^2} + \frac{4x^2}{x^2} = 9x^2 + 4$

5. $\frac{2x^3}{-2x} - \frac{8x^2}{-2x} + \frac{6x}{-2x} = -x^2 + 4x - 3$

6. $\frac{4x^6}{4x^3} - \frac{16x^5}{4x^3} + \frac{8x^4}{4x^3} = x^3 - 4x^2 + 2x$

7.

$$\begin{array}{r|l} & x + 2 \\ \hline x + 3 & x^2 + 5x + 6 \\ & x^2 + 3x \\ \hline & 2x + 6 \\ & 2x + 6 \\ \hline & 0 \end{array}$$

Answer: $x + 2$

8.

$$\begin{array}{r|l} & x - 1 \\ \hline x - 1 & x^2 - 2x + 1 \\ & x^2 - x \\ \hline & -x + 1 \\ & -x + 1 \\ \hline & 0 \end{array}$$

Answer: $x - 1$

9.

$$\begin{array}{r|l} & x + 5 \\ \hline x + 2 & x^2 + 7x + 10 \\ & x^2 + 2x \\ \hline & 5x + 10 \\ & 5x + 10 \\ \hline & 0 \end{array}$$

Answer: $x + 5$

10.

$$\begin{array}{r|l} & x + 7 \\ \hline x - 4 & x^2 + 3x - 28 \\ & x^2 - 4x \\ \hline & 7x - 28 \\ & 7x - 28 \\ \hline & 0 \end{array}$$

Answer: $x + 7$

11.

$$\begin{array}{r|l} & x - 4 \\ \hline x - 4 & x^2 - 8x + 16 \\ & x^2 - 4x \\ \hline & -4x + 16 \\ & -4x + 16 \\ \hline & 0 \end{array}$$

Answer: $x - 4$

12.

$$\begin{array}{r|l} & x - 2 \\ \hline x - 6 & x^2 - 8x + 12 \\ & x^2 - 6x \\ \hline & -2x + 12 \\ & -2x + 12 \\ \hline & 0 \end{array}$$

Answer: $x - 2$

13.

$$\begin{array}{r|l} & 3x + 1 \\ \hline x - 3 & 3x^2 - 8x - 3 \\ & 3x^2 - 9x \\ \hline & x - 3 \\ & x - 3 \\ \hline & 0 \end{array}$$

Answer: $3x + 1$

14.

$$\begin{array}{r|l} & 2x + 1 \\ \hline x + 2 & 2x^2 + 5x + 2 \\ & 2x^2 + 4x \\ \hline & x + 2 \\ & x + 2 \\ \hline & 0 \end{array}$$

Answer: $2x + 1$

15.

$$\begin{array}{r|l} & 5x + 4 \\ \hline x + 1 & 5x^2 + 9x + 4 \\ & 5x^2 + 5x \\ \hline & 4x + 4 \\ & 4x + 4 \\ \hline & 0 \end{array}$$

Answer: $5x + 4$

16.

$$\begin{array}{r|l} & 4x - 1 \\ \hline x + 5 & 4x^2 + 19x - 5 \\ & 4x^2 + 20x \\ \hline & -x - 5 \\ & -x - 5 \\ \hline & 0 \end{array}$$

Answer: $4x - 1$

17.

$$\begin{array}{r|l} & x - 2 \\ \hline 4x + 1 & 4x^2 - 7x - 2 \\ & 4x^2 + x \\ \hline & -8x - 2 \\ & -8x - 2 \\ \hline & 0 \end{array}$$

Answer: $x - 2$

18.

$$\begin{array}{r|l} & x + 4 \\ \hline 3x + 2 & 3x^2 + 14x + 8 \\ & 3x^2 + 2x \\ \hline & 12x + 8 \\ & 12x + 8 \\ \hline & 0 \end{array}$$

Answer: $x + 4$

19.

$$\begin{array}{r|l} & 4x + 3 \\ \hline 2x - 1 & 8x^2 + 2x - 3 \\ & 8x^2 - 4x \\ \hline & 6x - 3 \\ & 6x - 3 \\ \hline & 0 \end{array}$$

Answer: $4x + 3$

20.

$$\begin{array}{r|l} & 2x - 3 \\ \hline 5x + 3 & 10x^2 - 9x - 9 \\ & 10x^2 + 6x \\ \hline & -15x - 9 \\ & -15x - 9 \\ \hline & 0 \end{array}$$

Answer: $2x - 3$