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Factoring Practice:

1. $x^2 + 5x + 4$

$(x+1)(x+4)$

3. $x^2 + 13x + 40$

$(x+8)(x+5)$

5. $x^2 - 8x + 12$

$(x-6)(x-2)$

7. $x^2 + 6x - 27$

$(x+9)(x-3)$

9. $x^2 - 5x - 6$

$(x-6)(x+1)$

2. $x^2 + 9x + 14$

$(x+2)(x+7)$

4. $x^2 - 4x + 3$

$(x-3)(x-1)$

6. $x^2 + 3x - 10$

$(x+5)(x-2)$

8. $x^2 + 2x - 80$

$(x+10)(x-8)$

10. $x^2 - 14x - 72$

$(x-18)(x+4)$

Factoring Practice:

11. $4x^2 - 18x - 10$

$2(x-5)(2x+1)$

13. $2x^2 - 15x - 8$

$(2x+1)(x-8)$

15. $3x^2 + 32x - 11$

$(x+11)(3x-1)$

17. $3x^2 + 15x + 18$

$3(x+3)(x+2)$

19. $4x^2 + 32x - 28$

$4(x^2+8x-7)$

12. $5x^2 + 17x - 12$

$(x+4)(5x-3)$

14. $2x^2 + 9x - 18$

$(x+6)(2x-3)$

16. $11x^2 + 14x - 16$

$(x+2)(11x-8)$

18. $2x^2 - 9x + 10$

$(2x-5)(x-2)$

20. $2x^2 - 2x - 4$

$2(x-2)(x+1)$

$$\textcircled{11} \quad \frac{4x^2}{2} - \frac{18x}{2} - \frac{10}{2}$$

$$2(2x^2 - 9x - 5)$$

$$a.c = -10 \begin{matrix} & & -10 \\ & \swarrow & \\ & & 1 \end{matrix}$$

$$2\left(\frac{2x^2}{2x} - \frac{10x}{2x} + \frac{1x}{1} - \frac{5}{1}\right)$$

$$2(2x(x-5) + 1(x-5))$$

$$\boxed{2(x-5)(2x+1)}$$

$$\textcircled{13} \quad 2x^2 - 15x - 8$$

$$a.c = -16 \begin{matrix} & & -16 \\ & \swarrow & \\ & & 1 \end{matrix}$$

$$\frac{2x^2}{2x} - \frac{16x}{2x} + \frac{1x}{1} - \frac{8}{1}$$

$$2x(x-8) + 1(x-8)$$

$$\boxed{(x-8)(2x+1)}$$

$$\textcircled{15} \quad 3x^2 + 32x - 11$$

$$a.c = -33 \begin{matrix} & & 33 \\ & \swarrow & \\ & & -1 \end{matrix}$$

$$\frac{3x^2}{3x} + \frac{33x}{3x} - \frac{1x}{1} - \frac{11}{1}$$

$$3x(x+11) - 1(x+11)$$

$$\boxed{(x+11)(3x-1)}$$

$$\textcircled{17} \quad \frac{3x^2}{3} + \frac{15x}{3} + \frac{18}{3}$$

$$3(x^2 + 5x + 6)$$

$$\boxed{3(x+3)(x+2)}$$

$$\textcircled{19} \quad \frac{4x^2}{4} + \frac{32x}{4} - \frac{28}{4}$$

$$\boxed{4(x^2 + 8x - 7)}$$

$$\textcircled{12} \quad 5x^2 + 17x - 12$$

$$a.c = -60$$

$$\begin{matrix} & & & & \\ & & & \uparrow & \\ & & 20 & -3 & \end{matrix}$$

$$\frac{5x^2}{5x} + \frac{20x}{5x} - \frac{3x}{-3} - \frac{12}{-3}$$

$$5x(x+4) - 3(x+4)$$

$$\boxed{(x+4)(5x-3)}$$

$$\textcircled{14} \quad 2x^2 + 9x - 18$$

$$a.c = -36 \begin{matrix} & & 12 \\ & \swarrow & \\ & & -3 \end{matrix}$$

$$\frac{2x^2}{2x} + \frac{12x}{2x} - \frac{3x}{-3} - \frac{18}{3}$$

$$2x(x+6) - 3(x+6)$$

$$\boxed{(x+6)(2x-3)}$$

$$\textcircled{16}$$

$$11x^2 + 14x - 16$$

$$a.c = 176 \begin{matrix} & & 22 \\ & \swarrow & \\ & & -8 \end{matrix}$$

$$\frac{11x^2}{11x} + \frac{22x}{11x} - \frac{8x}{-8} - \frac{16}{-8}$$

$$11x(x+2) - 8(x+2)$$

$$\boxed{(x+2)(11x-8)}$$

$$\textcircled{18}$$

$$2x^2 - 9x + 10$$

$$a.c = 20 \begin{matrix} & & -5 \\ & \swarrow & \\ & & -4 \end{matrix}$$

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

$$x(2x-5) - 2(2x-5)$$

$$\boxed{(2x-5)(x-2)}$$

$$\textcircled{20}$$

$$\frac{2x^2}{2} - \frac{2x}{2} - \frac{4}{2}$$

$$2(x^2 - x - 2)$$

$$\boxed{2(x-2)(x+1)}$$