1. $4x^2 - 15x + 9$ $(4x - 3)(x - 3)$

2. $8x^2 - 10x - 3$ $(2x - 3)(4x + 1)$

3. $7x^2 + 29x + 4$ $(x + 4)(7x + 1)$

4. $12x^2 + 11x - 5$ $(4x + 5)(3x - 1)$

5. $9x^2 + 3x - 2$ $(3x + 2)(3x - 1)$

6. $6x^2 - 11x + 4$ $(2x - 1)(3x - 4)$

7. $2x^2 - 7x + 6$ $(2x - 3)(x - 2)$

8. $2x^2 + 11x - 6$ $(x + 6)(2x - 1)$

9. $4x^2 - 9x + 5$ $(4x - 5)(x - 1)$

10. $9x^2 + 9x + 2$ $(3x + 1)(3x + 2)$

① $\boxed{4}x^2 - 15x + 9$ Slip!

$x^2 - 15x + 36$ (4·9)

$\frac{-3}{} \cdot \frac{-12}{} = 36$ (a·c)

$\frac{-3}{} + \frac{-12}{} = -15$ (b)

$(x - \frac{3}{4})(x - \frac{12}{4})$ Divide! $\frac{12}{4} = 3$

Slide!

$(4x - 3)(x - 3)$

② $\boxed{8}x^2 - 10x - 3$ Slip!

$x^2 - 10x - 24$ (8·3)

$\frac{2}{} \cdot \frac{-12}{} = -24$ (a·c)

$\frac{2}{} + \frac{-12}{} = -10$ (b)

$(x + \frac{2}{8})(x - \frac{12}{8})$ Divide! $\frac{2}{8} = \frac{1}{4}$ $\frac{12}{8} = \frac{3}{2}$

$(x + \frac{1}{4})(x - \frac{3}{2})$ Reduce!

Slide!

$(4x + 1)(2x - 3)$

③ $\boxed{7}x^2+29x+4$ Slip!

$x^2+29x+28$ $(7\cdot 4)$

$\underline{28}\cdot\underline{1}=28$ $(a\cdot c)$

$\underline{28}+\underline{1}=29$ (b)

$(x+\frac{28}{7})(x+\frac{1}{7})$ Divide! $\frac{28}{7}=4$

Slide!

$(x+4)(7x+1)$

④ $\boxed{12}x^2+11x-5$ Slip!

$x^2+11x-60$ $(12\cdot(-5))$

$\underline{-4}\cdot\underline{15}=-60$ $(a\cdot c)$

$\underline{-4}+\underline{15}=11$ (b)

$(x-\frac{4}{12})(x+\frac{15}{12})$ Divide! $\frac{4}{12}=\frac{1}{3}$ $\frac{15}{12}=\frac{5}{4}$

$(x-\frac{1}{3})(x+\frac{5}{4})$ Reduce!

Slide!

$(3x-1)(4x+5)$

⑤ $\boxed{9}x^2 + 3x - 2$ slip!

$x^2 + 3x - 18$ $(9 \cdot 2)$

$-3 \cdot 6 = -18$ $(a \cdot c)$

$-3 + 6 = 3$ (b)

$(x - \frac{3}{9})(x + \frac{6}{9})$ Divide! $\frac{3}{9} = \frac{1}{3}$ $\frac{6}{9} = \frac{2}{3}$

$(x - \frac{1}{3})(x + \frac{2}{3})$

slide!

$(3x - 1)(3x + 2)$

⑥ $\boxed{6}x^2 - 11x + 4$ slip!

$x^2 - 11x + 24$ $(6 \cdot 4)$

$-3 \cdot -8 = 24$ $(a \cdot c)$

$-3 + -8 = -11$ (b)

$(x - \frac{3}{6})(x - \frac{8}{6})$ Divide! $\frac{3}{6} = \frac{1}{2}$ $\frac{8}{6} = \frac{4}{3}$

$(x - \frac{1}{2})(x - \frac{4}{3})$ Reduce!

slide!

$(2x - 1)(3x - 4)$

(7) $\boxed{2}x^2 - 7x + 6$

Slip!

$x^2 - 7x + 12 \quad (2 \cdot 6)$

$\underline{-3} \cdot \underline{-4} = 12 \quad (a \cdot c)$

$\underline{-3} + \underline{-4} = -7 \quad (b)$

$(x - \underline{3})(x - \underline{4})$

$\underline{2} \qquad\qquad \underline{2}$

Slide! Divide!

$\frac{4}{2} = 2$

$(2x - 3)(x - 2)$

(8) $\boxed{2}x^2 + 11x - 6$

Slip!

$x^2 + 11x - 12 \quad (2 \cdot (-6))$

$\underline{-1} \cdot \underline{12} = -12 \quad (a \cdot c)$

$\underline{-1} + \underline{12} = 11 \quad (b)$

$(x - \underline{1})(x + \underline{12})$

$\underline{2} \qquad\qquad \underline{2}$

Slide! Divide!

$\frac{12}{2} = 6$

$(2x - 1)(x + 6)$

(9) $\boxed{4}x^2 - 9x + 5$ Slip!

$x^2 - 9x + 20$ (4·5)

$\underline{-4} \cdot \underline{-5} = 20$ (a·c)

$\underline{-4} + \underline{-5} = -9$ (b)

$(x-4)(x-5)$ Divide! $\frac{4}{4} = 1$

$\frac{4}{4}$ Slide!

$(x-1)(4x-5)$

(10) $\boxed{9}x^2 + 9x + 2$ Slip!

$x^2 + 9x + 18$ (9·2)

$\underline{3} \cdot \underline{6} = 18$ (a·c)

$\underline{3} + \underline{6} = 9$ (b)

$(x+3)(x+6)$ $\frac{3}{9} = \frac{1}{3}$ $\frac{6}{9} = \frac{2}{3}$

$\frac{9}{9}$ $\frac{9}{9}$

$(x + \frac{1}{3})(x + \frac{2}{3})$ Slide!

$(3x+1)(3x+2)$