

1

$$\begin{array}{r}
 \quad \quad \quad +4 \\
 \quad \quad \quad \diagup \quad \diagdown \\
 2x^2 - 5x + 2 \\
 \quad \quad \quad \diagup \\
 \quad \quad \quad -1 \quad -4 \\
 \hline
 \frac{2}{-1} \quad \quad \frac{2}{-4} = \frac{1}{-2} \\
 \hline
 (2x-1)(x-2)
 \end{array}$$

2

$$\begin{array}{r}
 \quad \quad \quad 12 \\
 \quad \quad \quad \diagup \quad \diagdown \\
 2x^2 - 7x + 6 = \\
 \quad \quad \quad \diagup \\
 \quad \quad \quad -3 \quad -4 \\
 \hline
 \frac{2}{-3} \quad \quad \frac{2}{-4} = \frac{1}{-2} \\
 \hline
 (2x-3)(x-2)
 \end{array}$$

3

$$\begin{array}{r}
 \quad \quad \quad +6 \\
 \quad \quad \quad \diagup \quad \diagdown \\
 2x^2 + 5x + 3 \\
 \quad \quad \quad \diagup \\
 \quad \quad \quad 2 \quad 3 \\
 \hline
 \frac{2}{2} = \frac{1}{1} \quad \quad \frac{2}{3} \\
 \hline
 (x+1)(2x+3)
 \end{array}$$

4

$$\begin{array}{r}
 \quad \quad \quad +6 \\
 \quad \quad \quad \diagup \quad \diagdown \\
 2x^2 + 7x + 3 \\
 \quad \quad \quad \diagup \\
 \quad \quad \quad 1 \quad 6 \\
 \hline
 \frac{2}{1} \quad \quad \frac{2}{6} = \frac{1}{3} \\
 \hline
 (2x+1)(x+3)
 \end{array}$$

9

$$3x^2 + 8x + 4$$

\swarrow 12 \searrow
 \wedge
 6 2

$$\frac{3}{6} = \frac{1}{2} \quad \frac{3}{2}$$

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

10

$$4x^2 + 13x + 3$$

\swarrow 12 \searrow
 \wedge
 12 1

$$\frac{4}{12} = \frac{1}{3} \quad \frac{4}{1}$$

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

11

$$3x^2 + 10x = 8$$

$$\Rightarrow 3x^2 + 10x - 8 = 0$$

\swarrow -24 \searrow
 \wedge
 12 -2

$$\frac{3}{12} = \frac{1}{4} \quad \frac{3}{-2}$$

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

12

$$4x^2 - 3x = 10$$

$$\Rightarrow 4x^2 - 3x - 10 = 0$$

\swarrow -40 \searrow
 \wedge
 -8 5

$$\frac{4}{-8} = -\frac{1}{2} \quad \frac{4}{5}$$

$$(x-2)(4x+5)$$