

1) $3n^2 - 14n - 5$

$$\frac{3n^2}{n} + \frac{n}{n} - \frac{15n}{-5} - \frac{5}{-5}$$

$$\begin{array}{r} 15 \\ +1 \quad -15 \\ \hline 3 \quad 5 \end{array}$$

$$\frac{n(3n+1)}{3n+1} - \frac{5(3n+1)}{3n+1}$$

$$(3n+1)(n-5)$$

2) $\frac{14y^2}{7y} - \frac{35y}{7y}$

$$7y[2y-5]$$

3) $x^2 - 25x + 54$ ^{sums}

Prime

$$\begin{array}{r} 54 \\ \hline 1 \quad 54 \\ \hline 2 \quad 27 \\ \hline 3 \quad 18 \\ \hline 6 \quad 9 \end{array}$$

4) $\frac{6x^2}{2} + \frac{8x}{2} - \frac{8}{2}$

$$2[3x^2 + 4x - 4]$$

$$\frac{3x^2}{x} - \frac{2x}{x} + \frac{6x}{2} - \frac{4}{2}$$

$$\begin{array}{r} 12 \\ \hline 1 \quad 12 \\ -2 \quad +6 \\ \hline 3 \quad 4 \end{array}$$

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

$$3x-$$

5) $8x^4y^3 + 10x^2y + 6xy^4$

6) $64r^2 - 9$

7) $x^2 + 13x + 30$

8) $k^2 - 7k + km - 7m$

9) $7m^2 - 42m + 56$

10) $12 + 4a - 9b - 3ab$

11) $3x^2 - 14x - 15$

12) $81x^2 - 16$

13) $x^2 + xy - 12y^2$

14) $24t^9u^7 + 10t^5u^5 - 6t^6u$

15) $20x^3 - 12x^2 - 8x$

16) $n^5 - n^4$