

## Adding or Subtracting Rational Expressions with Like Denominators

Simplify each expression.

1)  $\frac{u-6v}{24uv^3} - \frac{u-5v}{24uv^3} = \frac{-1}{24uv^2}$

2)  $\frac{4x+5y}{15x} - \frac{x+5y}{15x} = \frac{1}{5}$

3)  $\frac{x+4y}{18y^2x^2} - \frac{x+3y}{18y^2x^2} = \frac{1}{18yx^2}$

4)  $\frac{u+5v}{24uv} - \frac{u+3v}{24uv} = \frac{1}{12u}$

5)  $\frac{x+1}{9x+36} - \frac{x-2}{9x+36} = \frac{1}{3(x+4)}$

6)  $\frac{2r+2}{6r^2+r-12} + \frac{r-6}{6r^2+r-12} = \frac{1}{2r+3}$

7)  $\frac{b-1}{12b^2+8b} + \frac{b+5}{12b^2+8b} = \frac{b+2}{2b(3b+2)}$

8)  $\frac{2n-4}{27n^2-54n} + \frac{n-2}{27n^2-54n} = \frac{1}{9n}$

9)  $\frac{3b-5}{2b^2-15b+18} - \frac{b-2}{2b^2-15b+18} = \frac{1}{b-6}$

10)  $\frac{n+4}{6n^3+24n^2} + \frac{n+4}{6n^3+24n^2} = \frac{1}{3n^2}$

11)  $\frac{a-5}{2a^2+a-15} + \frac{a}{2a^2+a-15} = \frac{1}{a+3}$

12)  $\frac{6v}{4v^4-16v^3} - \frac{3v+12}{4v^4-16v^3} = \frac{3}{4v^3}$

13)  $\frac{4x+4}{x^2-2x-8} - \frac{3x+2}{x^2-2x-8} = \frac{1}{x-4}$

14)  $\frac{3v-4}{2v^2+8v+6} - \frac{2v-7}{2v^2+8v+6} = \frac{1}{2v+2}$

15)  $\frac{4x+5}{36x^2+24x-12} - \frac{40x-7}{36x^2+24x-12} = \frac{-1}{x+1}$

16)  $\frac{5n-6}{n^2-10n+24} - \frac{6n-10}{n^2-10n+24} = \frac{1}{6-n}$