

Addition and Subtraction of Rational Expressions with Like Denominators

1. $\frac{5}{16} + \frac{3}{16} = \frac{1}{2}$
2. $\frac{23}{18} - \frac{11}{18} = \frac{2}{3}$
3. $\frac{5}{12} - \frac{7}{12} + \frac{11}{12} = \frac{3}{4}$
4. $\frac{7x}{15} - \frac{4x}{15} = \frac{x}{5}$
5. $\frac{12x}{7} - \frac{19x}{7} = -x$
6. $\frac{3a}{22} - \frac{9a}{22} - \frac{5a}{22} = -\frac{a}{2}$
7. $\frac{x+y}{3y^2} - \frac{x-y}{3y^2} = \frac{2}{3y}$
8. $\frac{4x+3y}{5x^2} + \frac{x-8y}{5x^2} = \frac{(x-y)}{x^2}$
9. $\frac{3x-2y}{x+y} - \frac{5x}{x+y} = -2$
10. $\frac{5a-3b}{a+2b} - \frac{3a-7b}{a+2b} = 2$
11. $\frac{6m^2+3m-2}{5m^2} + \frac{4m^2-3m+2}{5m^2} = 2$
12. $\frac{5a^2+3a-2b^2}{a^2-4b^2} - \frac{4a^2+3a+2b^2}{a^2-4b^2} = 1$
13. $\frac{3x-7}{(x-2)^2} + \frac{x-1}{(x-2)^2} = \frac{4}{x-2}$
14. $\frac{2x^2+4xy-5y^2}{x^2-5xy+6y^2} - \frac{x^2+4xy+4y^2}{x^2-5xy+6y^2} = \frac{(x+3y)}{(x-2y)}$
15. $\frac{x^2-4xy-y^2}{(2x+5y)^2} + \frac{x^2+7xy-4y^2}{(2x+5y)^2} = \frac{x-y}{2x+5y}$
16. $\frac{40x^2-24y^2}{5x-6y} + \frac{15x^2+12y^2}{5x-6y} = \frac{(55x^2-12y^2)}{(5x-6)}$
17. $\frac{4a^2-6ab-3b^2}{3a-7b} - \frac{2a^2-5ab-4b^2}{3a-7b} = 2a+b$
18. $\frac{3a^3-2a^2b-10b^2}{2a^2-5ab-12b^2} - \frac{5a^3+a^2b-a^2+4b^2}{2a^2-5ab-12b^2} + \frac{4a^3-5a^2b-2b^2}{2a^2-5ab-12b^2} = \frac{(2a^2-a-4b)}{(2a+3b)}$