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|  | Разложение на множители | Нахождение общего знаменателя | Нахождение дополнительного множителя | Нахождение новых числителей дробей | Сложение и вычитание алгебраических дробей |
| $\frac{5b}{12a}$ + $\frac{a}{4b}$ | $\frac{5b}{3∙4a}$ + $\frac{a}{4b}$ | $\frac{\begin{array}{c}\end{array}}{12ab}$ + $\frac{}{12ab}$ | b 3a | $\frac{5b^{2}}{12ab}$ + $\frac{3a^{2}}{12ab}$ | $$\frac{\begin{array}{c}5b^{2}+3a^{2}\end{array}}{12ab}$$ |
| $\frac{x}{x-y}$ **-** $\frac{y}{x+y}$ |  | $\frac{}{\left(x-y\right)\left(x+y\right)}$ **-** $\frac{}{\left(x-y\right)\left(x+y\right)}$ | x+y x-y | $\frac{x^{2}+xy}{\left(x-y\right)\left(x+y\right)}$ **–** $\frac{yx-y^{2}}{\left(x-y\right)\left(x+y\right)}$ | $\frac{x^{2}+xy-\left(yx-y^{2}\right)}{\left(x-y\right)\left(x+y\right)} $**=**$ \frac{x^{2}+y^{2}}{ \left(x-y\right)\left(x+y\right)}$ |
|  $\frac{5}{x^{2}+5x}$ + $\frac{x+15}{25-x^{2}}$ | $\frac{5}{x\left(x+5\right)}$ + $\frac{x+15}{\left(5-x\right)\left(x+5\right)}$ | $\frac{}{x\left(5-x\right)\left(x+5\right)}$ + $\frac{}{x\left(5-x\right)\left(x+5\right)}$ | 5-x x | $\frac{25-5x}{x\left(5-x\right)\left(x+5\right)}$ + $\frac{x^{2}+15x}{x\left(5-x\right)\left(x+5\right)}$ | $\frac{\begin{array}{c}\left(25-5x\right)+\left(x^{2}+15x\right)\end{array}}{x\left(5-x\right)\left(x+5\right)}$ = $\frac{25-5x+x^{2}+15x}{x\left(5-x\right)\left(x+5\right)}=$=$\frac{x^{2}+10x+25}{x\left(5-x\right)\left(x+5\right)}=\frac{\left(x+5\right)^{2}}{x\left(5-x\right)\left(x+5\right)}=\frac{x+5}{x\left(5-x\right)}$ |