Приложение 4

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| Уровень АВыполнить действия:а) $\frac{a-b}{a+b}$ ∙$ ( \frac{a}{5}$ + $\frac{b}{5}$ );б) $\left(1+ \frac{1}{a} \right):( 1- \frac{1}{a} )$;в) $\left(\frac{6}{a-b}- \frac{5}{a+b}\right)$ ∙ $\frac{a-b}{a+11b}$.Дополнительное задание$\left(\frac{3}{a}+ \frac{3}{a+b}\right):\frac{18(2a+b)}{a}$. | Уровень ВВыполнить действия:а) ( $\frac{ a}{2}+ \frac{a}{3} )∙\frac{1}{a^{2}} $;б) $\left( a+ \frac{a}{b}\right)∙\left( a-\frac{a}{ b}\right)$;в) $\left(\frac{3}{c}+ \frac{3}{c+d}\right):\frac{18(2c+d)}{c}$.Дополнительное задание$\left(\frac{2с}{с+d}+\frac{d-c}{c}\right): \frac{c^{2}+d^{2}}{с+d}$. | Уровень СВыполнить действия:а) $\frac{a^{2}}{3} ∙\left(\frac{a}{2}+ \frac{2}{a^{2}}\right)$;б) $\left(1+\frac{a+b}{a-b}\right)∙\left(2-\frac{2a}{a+b}\right)$;в) $\left(\frac{2a}{a+b}+\frac{b-a}{a}\right): \frac{a^{2}+b^{2}}{a+b}$.Дополнительное задание$\left(\frac{3}{m}+ \frac{3}{m+n}\right):\frac{18(2m+n)}{m}$. |

Ответы:

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| $$\frac{a^{3}+4}{2a^{2}}$$ | $$\frac{a+b}{5}$$ | $$\frac{c^{2 }+d^{2}}{c(c+d)}$$ | $$\frac{a-b}{5}$$ | $$\frac{a^{3 }+4}{6}$$ | $$\frac{1}{c}$$ | $$\frac{a+1}{a}$$ | $$\frac{2a}{a-b}$$ | $$\frac{3(2m+n)}{m(m+n)}$$ |
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| $$\frac{a-1}{a}$$ | $$\frac{1}{6(c+d)}$$ | $$\frac{a+1}{a-1}$$ | $$\frac{a+11b}{\left(a-b\right)\left(a+b\right)}$$ | $$\frac{3(2c+d)}{c(c+d)}$$ | $$\frac{1}{a+b}$$ | $$\frac{1}{6(m+n)}$$ | $$\frac{1}{a}$$ | $$\frac{a^{2}\left(b-1\right)(b+1)}{b^{2}}$$ |
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| $$\frac{a(b-1)}{b}$$ | $$\frac{3(2a+b)}{a(a+b)}$$ | $$\frac{a^{2 }+b^{2}}{a(a+b)}$$ | $$\frac{1}{6(a+b)}$$ | $$\frac{a(b+1)}{b}$$ | $$\frac{4ab}{\left(a+b\right)(a-b)}$$ | $$\frac{5}{6a}$$ | $$\frac{2b}{a+b}$$ | $$\frac{5a}{6}$$ |
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