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| **27. Složený lomený výraz**Složený lomený výraz je zlomek, který má v čitateli nebo jmenovateli lomený výraz.Složený lomený výraz lze nahradit podílem (dělením) lomených výrazů.$$Př. \frac{   \frac{x-1 }{3x}  }{\frac{x-1}{y}}=\frac{x-1}{3x}:\frac{x-1}{y}=\frac{x-1}{3x}.\frac{y}{x-1}=\frac{y}{3x} x,y\ne 0 x\ne 1$$$$ \frac{  \frac{3}{x}+\frac{1}{y} }{1-\frac{2}{x}}=\frac{  \frac{3y+x}{xy}  }{\frac{x-2}{x}}=\frac{3y+x}{xy}:\frac{x-2}{x}=\frac{3y+x}{xy}.\frac{x}{x-2}=\frac{3y+x}{x-2} $$$$x,y\ne 0 x\ne 2 $$4) Zjednodušte LV a určete podmínky:$$f) \frac{   \frac{2xy }{z^{2}}  }{\frac{xz}{3y}}=$$$$g) \frac{   \frac{x.(x-4) }{6y}  }{x-4}=$$$$h) \frac{  3. \left(a+5\right)  }{\frac{a.(a+5)}{2b}}=$$$$i ) \frac{   \frac{y.(x-3) }{2.(x+3)}  }{\frac{x-3}{y.(x+3)}}=$$$$a) \frac{   \frac{3m^{2}n^{3} }{2k^{2}m}  }{\frac{4n}{5k}}=$$$$b) \frac{   \frac{2a^{2}b }{a-3}  }{\frac{4ab^{2}}{3-a}}=$$$$c) \frac{   \frac{a+3 }{b^{2}}  }{\frac{-a-3}{3b}}=$$$$d) \frac{   \frac{x-2 }{6x}  }{\frac{x-2}{3xy}}=$$$$e) \frac{   \frac{a+3 }{3ab^{2}}  }{\frac{a-3}{4a^{2}b}}=$$ | 5) Zjednodušte lomené výrazy  a určete podmínky$$a) \frac{   \frac{a+1}{a}  }{\frac{a^{2}+2a+1}{a^{2}}}=$$$$b) \frac{ \frac{2x+2y}{y}}{\frac{x^{2}+xy}{x-y}}=$$$$c)\frac{  \frac{r^{2}-25}{5r-25}  }{\frac{r+5}{2r}}=$$$$d) \frac{   \frac{u^{2}-4u+4}{u^{2}-2u}  }{2-u}=$$$$e) \frac{  6x+3x^{2}     }{\frac{2y+xy}{x^{2}y-2xy}}=$$$$f ) \frac{   \frac{-3x-3y}{5x^{2}y}  }{\frac{2x^{2}+2xy}{x^{2}y+xy}}=$$$$g) \frac{   \frac{k^{2}-4}{3k-6}  }{\frac{k^{2}+2k}{k^{2}}}=$$$$h) \frac{ \frac{ab-2a}{2b^{2}}}{\frac{2b^{2}-4b}{a}}=$$$$i)\frac{  \frac{xy-2y^{2} }{2xz+yz}  }{\frac{3x-6y}{2x^{2}-xy}}=$$ | 6) Zjednodušte lomené výrazy a určete podmínky$$a) \frac{   \frac{1}{10}+\frac{1}{a}    }{\frac{a^{2}-100}{a^{2}}}=$$$$b) \frac{  1-\frac{y}{x}  }{\frac{x^{2}-y^{2}}{x+y}}=$$$$c )\frac{   \frac{1}{b}+\frac{1}{a}   }{\frac{-a-b}{ab}}=$$$$d) \frac{   \frac{a}{9}-\frac{1}{a}    }{\frac{a+3}{a}}=$$$$e) \frac{\frac{x^{2}}{y^{2}-x^{2}}+1}{1-\frac{x}{x-y}}=$$$$f )\frac{   \frac{y^{2}-x^{2}}{3x^{2}y^{2}}   }{\frac{1+2x}{x}-\frac{2y-1}{y}}=$$$$g) \frac{   1-\frac{2}{x}    }{3-\frac{x+4}{2}}=$$$$h) \frac{\frac{2}{s}-1}{1+\frac{1}{1-s}}=$$$$i)\frac{   1+\frac{8}{x}+\frac{16}{x^{2}}   }{1+\frac{4}{x}}=$$ |  |  |
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