

- 2.051.  $\frac{(a^2-b^2)(a^2+\sqrt[3]{b^2+a}\sqrt[3]{b})}{a\sqrt[3]{b+a}\sqrt{a-b}\sqrt[3]{b}-\sqrt{ab^2}} : \frac{a^3-b}{a\sqrt[3]{b}-\sqrt[6]{a^3b^2}-\sqrt[3]{b^2+a}\sqrt{a}}$ ;  $a=4,91, b=0,09$ .
- 2.052.  $\left((1-x^2)^{-1/2} + 1 + \frac{1}{(1-x^2)^{-1/2}-1}\right)^{-2} : (2-x^2-2\sqrt{1-x^2})$ .
- 2.053.  $\left((1-p^2)^{-1/2} - (1+p^2)^{-1/2}\right)^2 + 2(1-p^4)^{-1/2}$ .
- 2.054.  $\frac{3a^2+2ax-x^2}{(3x+a)(a+x)} - 2 + 10 \cdot \frac{ax-3x^2}{a^2-9x^2}$ .
- 2.055.  $\left(\frac{\sqrt[3]{x+y}}{\sqrt[3]{x-y}} + \frac{\sqrt[3]{x-y}}{\sqrt[3]{x+y}} - 2\right) : \left(\frac{1}{\sqrt[3]{x-y}} - \frac{1}{\sqrt[3]{x+y}}\right)$ .
- 2.056.  $\left(\frac{4}{a+\frac{1}{b+\frac{1}{c}}} : \frac{1}{a+\frac{1}{b}} - \frac{4}{b(abc+a+c)}\right)^{-1/2}$
- 2.057.  $\left(\left(\frac{x}{y-x}\right)^{-2} - \frac{(x+y)^2-4xy}{x^2-xy}\right)^2 \cdot \frac{x^4}{x^2y^2-y^4}$
- 2.058.  $\left(\left(\frac{1}{a} + \frac{1}{b+c}\right) : \left(\frac{1}{a} - \frac{1}{b+c}\right)\right) : \left(1 + \frac{b^2+c^2-a^2}{2bc}\right)$ ;  
 $a = 1\frac{33}{40}, b = 0,625, c = 3,2$
- 2.059.  $\left(\left(\frac{x^2}{y^3} + \frac{1}{x}\right) : \left(\frac{x}{y^2} - \frac{1}{y} + \frac{1}{x}\right)\right) : \frac{(x-y)^2+4xy}{1+\frac{y}{x}}$
- 2.060.  $\left(\frac{3}{2x-y} - \frac{2}{2x+y} - \frac{1}{2x-5y}\right) : \frac{y^2}{4x^2-y^2}$
- 2.061.  $(x^2 + 2x - \frac{11x-2}{3x+1}) : (x + 1 - \frac{2x^2+x+2}{3x+4})$ ;  $x = 7, (3)$
- 2.062.  $(6a^2 + 5a - 1 + \frac{a+4}{a+1}) : (3a - 2 + \frac{3}{a+1})$
- 2.063.  $\frac{x^{-6}-64}{4+2x^{-1}+x^{-2}} \cdot \frac{x^2}{4-\frac{4}{x}+\frac{1}{x^2}} - \frac{4x^2(2x+1)}{1-2x}$
- 2.064.  $\frac{2b+a-\frac{4a^2-b^2}{a}}{b^3+2ab^2-3a^2b} \cdot \frac{a^3b-2a^2b^2+ab^3}{a^2-b^2}$
- 2.065.  $\frac{\sqrt[4]{x^5}+\sqrt[4]{xy^4}-\sqrt[4]{x^4y}-\sqrt[4]{y^5}}{\sqrt{x-\sqrt{y}}} \cdot (\sqrt[4]{x} + \sqrt[4]{y})$
- 2.066.  $\frac{\sqrt{x^3}+\sqrt{xy^2}-\sqrt{x^2y}-\sqrt{y^3}}{\sqrt[4]{y^5}+\sqrt[4]{x^4y}-\sqrt[4]{xy^4}-\sqrt[4]{x^5}}$
- 2.067.  $\frac{a^{1/2}+ab^{-1}}{a^{-1/3}-a^{-1/6}b^{-1/3}+b^{-2/3}} - \frac{a}{\sqrt[3]{b}}$
- 2.068.  $\frac{(\frac{1}{a}+\frac{1}{b}-\frac{2c}{ab})(a+b+2c)}{\frac{1}{a^2}+\frac{1}{b^2}+\frac{2}{ab}-\frac{4c^2}{a^2b^2}}$ ;  $a = 7,4, b = \frac{5}{37}$

- 2.069.  $\frac{a^{7/3}-2a^{5/3}b^{2/3}+ab^{4/3}}{a^{5/3}-a^{4/3}b^{1/3}-ab^{2/3}+a^{2/3}b} : a^{1/3}$
- 2.070.  $\frac{(a^2-b^2)(\sqrt[3]{a}-\sqrt[3]{b})}{\sqrt[3]{a^4}+\sqrt[3]{ab^3}-\sqrt[3]{a^3b}-\sqrt[3]{b^4}}$
- 2.071.  $\frac{(m-1)\sqrt{m}-(n-1)\sqrt{n}}{\sqrt{m^3n+mn+m^2-m}}$
- 2.072.  $\frac{\sqrt[3]{ab}(\sqrt[3]{b^2}-\sqrt[3]{a^2})+\sqrt[3]{a^4}-\sqrt[3]{b^4}}{\sqrt[3]{a^4}+\sqrt[3]{a^2b^2}-\sqrt[3]{a^3b}} \cdot \sqrt[3]{a^3}$
- 2.073.  $\frac{\sqrt{5-2\sqrt{6}}}{(\sqrt[4]{3}+\sqrt[4]{2})(\sqrt[4]{3}-\sqrt[4]{2})}$
- 2.074.  $\frac{(a^{1/m}-a^{1/n})^2+4a^{(m+n)/(mn)}}{(a^{2/m}-a^{2/n})(\sqrt[m]{a^{m+1}}+\sqrt[n]{a^{n+1}})}$
- 2.075.  $\frac{(x^{2/m}-9x^{2/n}) \cdot (\sqrt[m]{x^{1-m}}-3\sqrt[n]{x^{1-n}})}{(x^{1/m}+3x^{1/n})^2-12x^{(m+n)/(mn)}}$
- 2.076.  $\frac{3\sqrt{12}}{\sqrt{45-4\sqrt{3}}} + 5\sqrt{2}, 4(\sqrt{15}+3)$
- 2.077.  $\frac{a^{-1}-b^{-1}}{a^{-3}+b^{-3}} : \frac{a^2b^2}{(a-b)^2-3ab} \cdot \left(\frac{a^2-b^2}{ab}\right)^{-1}, a = 1 - \sqrt{2}, b = 1 + \sqrt{2}$
- 2.078.  $\left(\frac{1}{t^2+3t+2} + \frac{2t}{t^2+4t+3} + \frac{1}{t^2+5t+6}\right)^2 \cdot \frac{(t-3)^2+12t}{2}$
- 2.079.  $\left(\sqrt{\sqrt{m}-\sqrt{\frac{m^2-9}{m}}} + \sqrt{\sqrt{m}+\sqrt{\frac{m^2-9}{m}}}\right)^2 \cdot \sqrt{\frac{m^2}{4}}$
- 2.080.  $\frac{(a-b)^2+ab}{(a+b)^2-ab} : \frac{a^5+b^5+a^2b^3+a^3b^2}{(a^3+b^3+a^2b+ab^2)(a^3-b^3)}$
- 2.081.  $\left(\frac{t\sqrt{t+2}}{\sqrt{t-2}} - \frac{2\sqrt{t-2}}{\sqrt{t+2}} - \frac{4t}{\sqrt{t^2-4}}\right)^{1/2} : \sqrt[4]{t^2-4}$

Odpovědi: **2.051.** 5 . **2.052.**  $1 - x^2$  **2.053.**  $2 / (1 - p^4)$  **2.054.** 1 **2.055.**  
 $\sqrt[3]{x + y} - \sqrt[3]{x - y}$  **2.056.**  $1/2$  **2.057.**  $(x - y)/(x + y)$  **2.058.** 1 **2.059.**  
 $1/(xy)$  **2.060.**  $24/(5y - 2x)$  . **2.061.** 20 **2.062.**  $2a + 3$  **2.063.**  $1 + 2x$   
**2.064.**  $(a - b)/(a + b)$  **2.065.**  $x + y$  **2.066.**  $-(\sqrt[4]{x} + \sqrt[4]{y})$  **2.067.**  $a^{5/6}$   
**2.068.** 1 **2.069.**  $a^{1/3} + b^{1/3}$  **2.070.**  $a - b$  **2.071.**  $(\sqrt{m} - \sqrt{n})/m$  **2.072.**  
 $\sqrt[3]{a^2} - \sqrt[3]{b^2}$  **2.073.** 1 **2.074.**  $\frac{1}{a(\sqrt[n]{a} - \sqrt[n]{a})}$  **2.075.**  $\frac{x^{1/m} + 3x^{1/n}}{x}$  **2.076.** 6  
**2.077.**  $1/4$  **2.078.** 2 **2.079.**  $\sqrt{2}(m+3)$  **2.080.**  $a - b$  **2.081.**  $\sqrt{t^2 - 4}/(t + 2)$