
1. Vypočítej, zapisuj podmínky a nezapomeň krátit:

Strana 1

a) $\frac{2pm}{p+1} : \frac{m^2}{2p+2} =$

b) $\frac{m+9}{mp+p} : \frac{(m+9)^2}{3m+3} =$

c) $\frac{pm}{m^2} : \frac{4p^2}{1} =$

d) $\frac{4m^4}{op^2} : \frac{8m^3}{p \cdot (m+1)} =$

e) $\frac{m^2-1}{m^2-9} : \frac{m-1}{m+3} =$

f) $\frac{m^2-4}{p+2} : \frac{(m-2)^2}{1} =$

g) $\frac{ab}{4c} : \frac{6a}{c^2} =$

Podpis rodičů:

$$\text{h)} \quad \frac{ab+b}{a} : \frac{a+1}{a-2} =$$

$$\text{i)} \quad \frac{a-b}{2b-4} : \frac{(a-b)^2}{2a} =$$

$$\text{j)} \quad \frac{8b}{a} : \frac{bc}{6a^2} =$$

$$\text{k)} \quad \frac{b-2}{1-b} : \frac{b}{a-ab} =$$

$$\text{l)} \quad \frac{(a+b)^2}{3b} : \frac{a+b}{3a-9} =$$

$$\text{m)} \quad \frac{6x-12}{4} : \frac{3x-6}{3x} =$$

$$\text{n)} \quad \frac{4-x^2}{2x+4} : \frac{2-x}{4} =$$

$$\text{o)} \quad \frac{x^4-x^3}{5x^4} : \frac{x^2-x}{10x} =$$

$$\text{p)} \quad \frac{x-1}{x+3} : \frac{x^2-9}{(x-1)^2} =$$

$$\text{q)} \quad \frac{x-y}{1} : \frac{x^2-y^2}{(x+y)^2} =$$

$$\text{r)} \quad \frac{x^2-y^2}{(x-y)^2} : \frac{(x+y)^2}{1} =$$

Podpis rodičů:

2. Vypočítej, zapisuj podmínky a nezapomeň krátit:

$$\text{a) } \frac{2pm}{p+1} : \frac{m^2}{2p+2} = \left[\frac{4p}{m} \right] p \neq -1, m \neq 0$$

$$\text{b) } \frac{m+9}{mp+p} : \frac{(m+9)^2}{3m+3} = \left[\frac{3}{p \cdot (m+9)} \right] m \neq -9, m \neq -1, p \neq 0$$

$$\text{c) } \frac{pm}{m^2} : \frac{4p^2}{1} = \left[\frac{1}{4m^2p} \right] m \neq 0, p \neq 0$$

$$\text{d) } \frac{4m^4}{op^2} : \frac{8m^3}{p \cdot (m+1)} = \left[\frac{m \cdot (m+1)}{2op} \right] o \neq 0, p \neq 0, m \neq -1, \\ m \neq 0$$

$$\text{e) } \frac{m^2-1}{m^2-9} : \frac{m-1}{m+3} = \left[\frac{m+1}{m-3} \right] m \neq -3, m \neq 3, m \neq 1$$

$$\text{f) } \frac{m^2-4}{p+2} : \frac{(m-2)^2}{1} = \left[\frac{m+2}{(p+2)(m-2)} \right] p \neq -2, m \neq 2$$

$$\text{g) } \frac{ab}{4c} : \frac{6a}{c^2} = \left[\frac{bc}{24} \right] a \neq 0, c \neq 0$$

$$h) \frac{ab+b}{a} : \frac{a+1}{a-2} = \left[\frac{b \cdot (a-2)}{a} \right] \quad a \neq 0, a \neq 2, a \neq -1$$

$$i) \frac{a-b}{2b-4} : \frac{(a-b)^2}{2a} = \left[\frac{a}{(b-2)(a-b)} \right] \quad b \neq 2, a \neq 0, a \neq b$$

$$j) \frac{8b}{a} : \frac{bc}{6a^2} = \left[\frac{48a}{c} \right] \quad a \neq 0, b \neq 0, c \neq 0$$

$$k) \frac{b-2}{1-b} : \frac{b}{a-ab} = \left[\frac{(b-2) \cdot a}{b} \right] \quad b \neq 1, a \neq 0, b \neq 0$$

$$l) \frac{(a+b)^2}{3b} : \frac{a+b}{3a-9} = \left[\frac{(a+b) \cdot (a-3)}{b} \right] \quad b \neq 0, a \neq 3, a \neq -b$$

$$m) \frac{6x-12}{4} : \frac{3x-6}{3x} = \left[\frac{3x}{2} \right] \quad x \neq 0, x \neq 2$$

$$n) \frac{4-x^2}{2x+4} : \frac{2-x}{4} = [2] \quad x \neq 2, x \neq -2$$

$$\text{o) } \frac{x^4 - x^3}{5x^4} : \frac{x^2 - x}{10x} = \left[\frac{2}{x} \right] \quad x \neq 0, x \neq 1$$

$$\text{p) } \frac{x-1}{x+3} : \frac{x^2-9}{(x-1)^2} = \left[\frac{(x-1)^3}{(x+3) \cdot (x^2-9)} \right] \quad x \neq 3, x \neq -3, x \neq 1$$

$$\text{q) } \frac{x-y}{1} : \frac{x^2-y^2}{(x+y)^2} = [x+y] \quad x \neq y, x \neq -y$$

$$\text{r) } \frac{x^2-y^2}{(x-y)^2} : \frac{(x+y)^2}{1} = \left[\frac{1}{x^2-y^2} \right] \quad x \neq y, x \neq -y$$

Literatura:

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