Př. 1: Urči podmínky řešitelnosti:

a) $\dfrac{x^3}{x^5} = \qquad \dfrac{3k^2}{6k} = \qquad \dfrac{r^2 x}{rx^2} = \qquad \dfrac{2c^6}{5c^3} = \qquad \dfrac{16xy}{20x^2 z} = \qquad \dfrac{6p}{9p^4 q} = \qquad \dfrac{2ab^2 c}{8a^2 bc^2} =$

b) $\dfrac{7bc^2}{21bd^3} = \qquad \dfrac{9x^3 y^3}{\left(3xy^2\right)^2} = \qquad \dfrac{\left(3m\right)^3 n}{9m^3 n^3} = \qquad \dfrac{r\left(pq\right)^2}{p^2 q^4 r} = \qquad \dfrac{k+1}{k^2 + k} = \qquad \dfrac{ab - 4b^2}{a^2 - 4ab} =$

c) $\dfrac{4x^2 + 4x}{2xy + 2x} = \qquad \dfrac{3r^2 - 3r^3}{r - r^2} = \qquad \dfrac{10rs - 14rt}{20s - 28t} = \qquad \dfrac{6a + 2ab}{2a^2 - 4a} = \qquad \dfrac{m^2 + m}{m^2 - m} =$

d) $\dfrac{9z^3 - 27vz}{z^4 - 3vz^2} = \qquad \dfrac{4\left(x - y\right)^2}{6xy - 6y^2} = \qquad \dfrac{u + 3}{u^2 - 9} = \qquad \dfrac{z^2 - 1}{az + a} = \qquad \dfrac{r^2 - 4}{r + 2} =$

e) $\dfrac{\left(m + n\right)^2}{mn + n^2} = \qquad \dfrac{x^2 + 5x}{x^2 - 25} = \qquad \dfrac{r + s}{r^2 + 2rs + s^2} = \qquad \dfrac{3p - 3q}{\left(p - q\right)^2} = \qquad \dfrac{2\left(a + 5\right)^2}{2a^2 - 50} =$

f) $\dfrac{5c + 10}{2c^2 - 8} = \qquad \dfrac{h - 1}{h^2 - 1} = \qquad \dfrac{a^4 - 9}{a^2 - 3} = \qquad \dfrac{a^2 b^2}{a^2 b - ab^2} = \qquad \dfrac{2h^2 + 6h}{4hk} =$

g) $\dfrac{xy^2}{x^2 y - xy^3} = \qquad \dfrac{2rs}{2r^2 - 2rs} = \qquad \dfrac{4pq + 2p^2 q}{2pq} = \qquad \dfrac{mn - m^2 n}{mn^2} = \qquad \dfrac{7a + 14}{4a^2 - 16} =$

h) $\dfrac{20a^2 b}{4a^2 bc - 8a^2 b} = \qquad \dfrac{36a^2}{9a^3 - 36a} = \qquad \dfrac{12r^2 s^4 - 60r^2 s^2}{12r^2 s^2} = \qquad \dfrac{2p^2 q - 4pq^2}{4pq^2} =$

i) $\dfrac{a^4 - b^4}{a^2 + b^2} = \qquad \dfrac{x + 1}{ax + a} \qquad \dfrac{a^2 + b^2 - 2ab}{a - b} = \qquad \dfrac{9 - s^2}{s + 3} = \qquad \dfrac{x^2 - x}{x^2 + x} =$

j) $\dfrac{8b + 4u}{4b^2 + 4bu + u^2} = \qquad \dfrac{4a^2 + 4ab + b^2}{16 + 8b} = \qquad \dfrac{3r^2 - 3r^3}{r - r^2} =$

k) $\dfrac{a^2 - 2ab + b^2}{a - b} = \qquad \dfrac{a^2 b^2}{a^2 b - ab^2} = \qquad \dfrac{x^2 + 5x}{x^2 - 25} = \qquad \dfrac{2u + 2v}{2u^2 - 2v^2} =$

l) $\dfrac{p^2 - 2pq + q^2}{5p - 5q} = \qquad \dfrac{s^2 - 16}{s^2 - 8s + 16} = \qquad \dfrac{4 - 2x}{2 - x} = \qquad \dfrac{m + n}{m^2 + 2mn + n^2} =$

$\dfrac{2c - 4}{c - 2} = \qquad \dfrac{u + v}{u^2 + 2uv + v^2} =$