

Př. 3: Urči podmínky řešitelnosti:

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

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

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

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

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

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

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

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

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

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

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

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

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