

Řešte rovnice s neznámou x

a) $(4+x)(a^2+x) - (a^2-x)(4-x) = 8ax + 2a^2 - 8$

b) $a^2x + 1 = x + a$

c) $\frac{x+1}{a} + \frac{x+3}{a} = x - 1$

d) $(2a-1)x - 6 = ax$

e) $\frac{x-a}{2-a} = \frac{x+a}{2+a}$

f) $(x+3)(1-a^2) = x + a^3x$

g) $ax + 1 = \frac{1+x}{a}$

h) $6(2+x) = ax + a$

i) $\frac{a-x}{a-2} - \frac{x-2}{a+2} = \frac{4a}{a^2-4}$

j) $x(a+2) + a(x-2) = x + a$

- a) pro $a \neq 2 \dots P = \left\{ \frac{a+2}{a-2} \right\}$
 pro $a = 2 \dots P = R$
- b) pro $a \neq \pm 1 \dots P = \left\{ \frac{1}{a+1} \right\}$
 pro $a = 1 \dots P = R$
 pro $a = -1 \dots P = \emptyset$
- c) pro $a \neq 0; 2 \dots P = \left\{ \frac{a+4}{a-2} \right\}$
 pro $a = 0 \dots RNS$
 pro $a = 2 \dots P = \emptyset$
- d) pro $a \neq 1 \dots P = \left\{ \frac{6}{a-1} \right\}$
 pro $a = 1 \dots P = \emptyset$
- e) pro $a \neq \pm 2; 0 \dots P = \{2\}$
 pro $a = \pm 2 \dots RNS$
 pro $a = 0 \dots P = R$
- f) pro $a \neq -1; 0 \dots P = \left\{ \frac{3(1-a)}{a^2} \right\}$
 pro $a = -1 \dots P = R$
 pro $a = 0 \dots P = \emptyset$
- g) pro $a \neq \pm 1; 0 \dots P = \left\{ -\frac{1}{a+1} \right\}$
 pro $a = 1 \dots P = R$
 pro $a = -1 \dots P = \emptyset$
 pro $a = 0 \dots RNS$
- h) pro $a \neq 6 \dots P = \left\{ \frac{a-12}{6-a} \right\}$
 pro $a = 6 \dots P = \emptyset$
- i) pro $a \neq \pm 2; 0 \dots P = \left\{ \frac{a^2-4}{2a} \right\}$
 pro $a = \pm 2 \dots RNS$
 pro $a = 0 \dots P = \emptyset$
- j) pro $a \neq -\frac{1}{2} \dots P = \left\{ \frac{3a}{2a+1} \right\}$
 pro $a = -\frac{1}{2} \dots P = \emptyset$