



Pokój nr 1

1.

$$\frac{3}{2x-3} = 2x - 5 \quad x = 1 \text{ lub } x = 3$$

2.

$$\frac{x-2}{x-3} = 1 + \frac{2}{x-2} \quad x = 4$$

3.

$$\frac{x+1}{x-3} + \frac{x-2}{x+1} = \frac{x^2+x+12}{x^2-2x-3} \quad x=5$$



Pokój nr 2

1.

$$\frac{3}{3x-1} = 3x + 1 \quad x = -2/3 \text{ lub } x = 2/3$$

2.

$$3 + \frac{2}{x+1} = \frac{2x+2}{x} \quad x = -2 \text{ lub } x=1$$

3.

$$\frac{3x-1}{3x+1} = \frac{12}{9x^2-1} + \frac{3x+1}{3x-1} \quad x=-1$$





Pokój nr 3

1.

$$\frac{12}{5x-2} = 2x - 6 \quad x = 0 \text{ lub } x = 3,4$$

2.

$$\frac{x+2}{x-1} = \frac{x-1}{x+1} + 2 \quad x = -0,5 \text{ lub } x=3$$

3.

$$\frac{x+5}{x^2-1} + \frac{2}{x+1} = \frac{2x-1}{x^2-2x+1} \quad x=2$$



Pokój nr 4

1.

$$\frac{25}{3x-1} = 3x - 1 \quad x = -4/3 \text{ lub } x = 2$$

2.

$$\frac{7}{x+1} + \frac{3}{x} = \frac{6}{x-2} \quad x = -1/4 \text{ lub } x=6$$

3.

$$\frac{3}{x+3} + \frac{2}{x-3} = \frac{7}{x^2-9} \quad x=2$$





Pokój nr 5

1.

$$\frac{x-1}{x+5} = \frac{x-3}{x-1} \quad x = 4$$

2.

$$\frac{2x}{x+1} + \frac{x-4}{x-1} = 1 \quad x = -1/2 \text{ lub } x=3$$

3.

$$\frac{x+4}{x+2} = \frac{x+1}{x-2} + \frac{x^2-x-11}{x^2-4} \quad x=-1 \text{ lub } x=1$$



Pokój nr 6

1.

$$\frac{x+3}{x+5} = \frac{x-1}{x-3} \quad x = -1$$

2.

$$\frac{2x-4}{x+2} + \frac{3x-1}{x+3} = 1 \quad x = -2,5 \text{ lub } x=2$$

3.

$$\frac{x-2}{x} + \frac{1}{x-4} = \frac{4}{x^2-4x} \quad x=1$$



HASŁO do zaszyfrowanej niespodzianki to: $6 \cdot 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 720$