

1. Izračunaj:

$$a) \frac{4\frac{4}{7} \cdot 4\frac{3}{4}}{2\frac{5}{7}}$$

$$b) \frac{\frac{1}{3} - \frac{5}{19}}{\frac{2}{3} - \frac{10}{19}}$$

$$c) \frac{\frac{1}{2} + \frac{2}{3} + \frac{3}{4}}{\frac{1}{3} + \frac{1}{4} - \frac{1}{5}}$$

2. Skrči izraze:

$$a) \frac{4ab}{c} \cdot \frac{5a}{2bc} \cdot \frac{3c}{5ab}$$

$$b) 12ab^2 \cdot \frac{a+3b}{3b}$$

$$c) \frac{a+b}{x-y} \cdot \frac{2x-2y}{by+ay}$$

$$d) \frac{a^2 - b^2}{a^2 - 2ab + b^2} \cdot \frac{-b+a}{a+b}$$

$$e) \frac{a^2 - 9}{a} \cdot \frac{a-2}{2a^2 - 6a} \cdot \frac{a^2 + a - 6}{6a^3}$$

3. Skrči izraze:

$$a) \left(3 + \frac{3y}{x-y}\right) \cdot \left(2 - \frac{x+y}{x}\right)$$

$$b) \left(\frac{u+3}{u-3} - \frac{u-3}{u+3}\right) : \frac{3u}{u^2 - 9}$$

$$c) \frac{x-8}{2x-14} : \left(\frac{1}{4} - \frac{x-6}{x^2 - 7x}\right)$$

$$*d) \left(\frac{1}{2} - \frac{5}{x-3}\right) : \frac{13-x}{x^2 + 2x - 15}$$

4. Izračunaj vrednost izrazov:

$$a) \frac{\frac{u^2 - 64}{u^3 + 5u^2}}{\frac{u^2 - 6u - 16}{u^2 + 7u + 10}}$$

$$b) \frac{\frac{5x^2 + 30x}{x^2 - 36}}{\frac{x^4 + 8x^3}{x^2 + 2x - 48}}$$