

## Γενικές ασκήσεις 1

1

$$\frac{\frac{\frac{\alpha}{\beta}}{\frac{\gamma}{\delta}}}{\frac{\alpha}{\gamma}} \div \frac{\frac{\alpha}{\beta}}{\frac{\frac{\gamma}{\delta}}{\alpha}}$$

2.

$$\frac{(\mu-\nu)^2 - 2(\mu-\nu)\cdot\rho + \rho^2}{\mu^2 - 2\mu\nu + \nu^2 - \rho^2} + 1$$

3.

$$\frac{\frac{x-3}{x+3} + \frac{3+x}{3-x}}{\frac{x+1}{x+2} - \frac{x-1}{x-2}}$$

4.

$$\frac{\frac{1}{\alpha\beta} + \frac{1}{\alpha\gamma} + \frac{1}{\beta\gamma}}{\frac{\alpha+\beta+\gamma}{\alpha\beta\gamma}}$$

5.

$$\left(\frac{1}{10x^2} + \frac{5}{4x} - \frac{7}{5x}\right) \div \frac{10 - 15x}{\frac{20x^2}{x-1}}$$

6.

$$\left(\frac{\beta - \gamma}{\beta\gamma} + \frac{\gamma - \alpha}{\gamma\alpha} + \frac{\alpha - \beta}{\alpha\beta}\right) - \frac{\frac{(\beta - \gamma)^3}{\beta\gamma}}{\frac{(2\beta - 2\gamma)^2}{\alpha^2\beta^2\gamma^2}}$$