

## Προσθέσεις 3

**A.** Να γίνουν οι πράξεις:

$$1. \quad \frac{7}{\kappa^2 \lambda} + \frac{7}{\lambda \kappa^2} - \frac{7}{\kappa^2 \lambda^2 \mu}$$

$$2. \quad \frac{\alpha}{\alpha + \beta} - \frac{\beta}{\alpha - \beta}$$

$$3. \quad \left(x - \frac{1}{x}\right)^2 \cdot \frac{x^3 + x^2}{(x + 1)^3}$$

$$4. \quad \frac{8x}{x^2 - 16} + \frac{1}{x + 4} + \frac{4}{4 - x}$$

**B.** Να αποδείξετε ότι:

$$1. \quad \frac{x^2 + \psi^2}{x^2} + \frac{2\psi}{x} = \left(1 + \frac{\psi}{x}\right)^2$$

$$2. \quad \left(\frac{\alpha}{\alpha + \beta} + \frac{\beta}{\alpha - \beta}\right) \div \left(\frac{\alpha}{\alpha - \beta} - \frac{\beta}{\alpha + \beta}\right) = 1$$