

## Φυλλάδιο Ασκήσεων

### Ασκήσεις Παραγοντοποίησης (Τάξη Α' Λυκείου)

Να παραγοντοποιήσετε τις παρακάτω παραστάσεις:

- |   |   |  |
|---|---|--|
| (1) $5x-5y$                                   | (2) $3\alpha x+5\alpha\omega$                     | (3) $8x^2-10x$                                   |
| (4) $16x^3-24x^2$                             | (5) $15x^2y-5xy^2-20xy$                           | (6) $12\alpha^3\beta^2\gamma^4-18\alpha^2\gamma$ |
| (7) $(3x-1)(x+2)+5(3x-1)$                     | (8) $(2x+3)y-4x-6$                                | (9) $(4x+1)y+1+4x$                               |
| (10) $(5-2x)^2+4x-10$                         | (11) $2x^2+8x-(x+4)^2$                            | (12) $\alpha x-\alpha\omega+\beta x-\beta\omega$ |
| (13) $x+y+1+xy$                               | (14) $3\alpha\beta+\beta^2+3\alpha y+y\beta$      | (15) $x^4-x^3+x-1$                               |
| (16) $5x^2+8xy+3y^2$                          | (17) $3x^2+xy-2y^2$                               | (18) $x^2-y^2$                                   |
| (19) $2x^2-18$                                | (20) $x^2-5$                                      | (21) $x^2-\frac{1}{9}$                           |
| (22) $(3x-2)^2-16$                            | (23) $64x^2-(x-1)^2$                              | (24) $x^3-9x$                                    |
| (25) $x^3+64$                                 | (26) $2x^3+16$                                    | (27) $(3x-2)^3-x^3$                              |
| (28) $x^8-x^5+x^3-1$                          | (29) $(3x+2)(x+4)-x^2+16$                         | (30) $x^5-4-4x^3+2x$                             |
| (31) $x^3+27$                                 | (32) $x^2-8x+16$                                  | (33) $4x^2-4x+1$                                 |
| (34) $\omega^2-\frac{\omega}{3}+\frac{1}{36}$ | (35) $\frac{x^2}{16}-\frac{1}{6}xy+\frac{y^2}{9}$ | (36) $49x^2+\frac{1}{4}+7x$                      |
| (37) $x^3+6x^2+12x+8$                         | (38) $x^3-3x^2+3x-1$                              | (39) $2x^2+3x-2$                                 |
| (40) $-14x^2+3x+5$                            | (41) $x^2-5x+6$                                   | (42) $x^2-2x-8$                                  |
| (43) $10x^2+xy-3y^2$                          | (44) $-3x^2+7xy-2y^2$                             | (45) $6x^2+xy\omega-2\omega^2y^2$                |
| (46) $x^4+x^2-6$                              | (47) $2x^4+x^2-1$                                 | (48) $-x^4+2x^2+3$                               |
| (49) $(x+y)^2-3(x+y)+2$                       | (50) $3(x+y)^2+2(x+y)-1$                          |  |
| (51) $2(x+y)^3-12(x+y)^2+18(x+y)$             | (52) $4(x-\omega)^3-(x-\omega)^2-4(x-\omega)^4$   |  |
| (53) $x^4+25y^4-6x^2y^2$                      | (54) $x^4+16y^4$                                  |  |
| (55) $(2-5x)^3+(4+3x)^3+(2x-6)^3$             | (56) $27(x-2)^3+64(x-3)^3-(7x-16)^3$              |  |