

6.5

$$1) \quad r^2 - 16$$

$$(r) \quad (4)$$

$$(r + 4)(r - 4)$$

$$3) \quad v^2 - 25$$

$$(v) \quad (5)$$

$$(v + 5)(v - 5)$$

$$5) \quad p^2 - 4$$

$$(p) \quad (2)$$

$$(p + 2)(p - 2)$$

$$7) \quad 9k^2 - 4$$

$$(3k) \quad (2)$$

$$(3k + 2)(3k - 2)$$

$$9) \quad 3x^2 - 27$$

$$3(x^2 - 9)$$

$$(x) \quad (3)$$

$$3(x + 3)(x - 3)$$

$$11) \quad 16x^2 - 36$$

$$4(4x^2 - 9)$$

$$(2x) \quad (3)$$

$$4(2x + 3)(2x - 3)$$

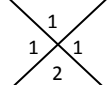
$$13) \quad 18a^2 - 50b^2$$

$$2(9a^2 - 25b^2)$$

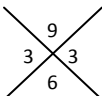
$$(3a) \quad (5b)$$

$$2(3a + 5b)(3a - 5b)$$

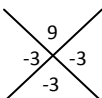
$$15) \quad a^2 - 2a + 1$$

$$(a - 1)^2$$


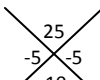
$$17) \quad x^2 + 6x + 9$$

$$(x + 3)^2$$



$$19) \quad x^2 - 6x + 9$$

$$(x - 3)^2$$


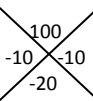
$$21) \quad 25p^2 - 10p + 1$$

$$(5p - 1)^2$$


$$23) \quad 25a^2 + 30ab + 9b^2$$

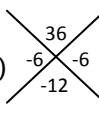
$$(5a + 3b)^2$$


$$25) \quad 4a^2 - 20ab + 25b^2$$

$$(2a - 5b)^2$$


$$27) \quad 8x^2 - 24xy + 18y^2$$

$$2(4x^2 - 12xy + 9y^2)$$

$$2(2x - 3y)^2$$


$$29) \quad 8 - m^3$$

$$(2) \quad (m)$$

$$(2 - m)(4 + 2m + m^2)$$

$$31) \quad x^3 - 64$$

$$(x) \quad (4)$$

$$(x - 4)(x^2 + 4x + 16)$$

$$33) \quad 216 - u^3$$

$$(6) \quad (u)$$

$$(6 - u)(36 + 6u + u^2)$$

$$35) \quad 125a^3 - 64$$

$$(5a) \quad (4)$$

$$(5a - 4)(25a^2 + 20a + 16)$$

$$37) \quad 64x^3 + 27y^3$$

$$(4x) \quad (3y)$$

$$(4x + 3y)(16x^2 - 12xy + 9y^2)$$

$$39) \quad 54x^3 + 250y^3$$

$$2(27x^3 + 125y^3)$$

$$(3x) \quad (5y)$$

$$2(3x + 5y)(9x^2 - 15xy + 25y^2)$$

$$\begin{aligned} 41) \quad & a^4 - 81 \\ & (a^2) (9) \\ & (a^2 + 9)(a^2 - 9) \\ & \quad (a) (3) \\ & (a^2 + 9)(a + 3)(a - 3) \end{aligned}$$

$$\begin{aligned} 43) \quad & 16 - z^4 \\ & (4) (z^2) \\ & (4 + z^2)(4 - z^2) \\ & \quad (2) (z) \\ & (4 + z^2)(2 + z)(2 - z) \end{aligned}$$

$$\begin{aligned} 45) \quad & x^4 - y^4 \\ & (x^2) (y^2) \\ & (x^2 + y^2)(x^2 - y^2) \\ & \quad (x) (y) \\ & (x^2 + y^2)(x + y)(x - y) \end{aligned}$$

$$\begin{aligned} 47) \quad & m^4 - 81b^4 \\ & (m^2) (9b^2) \\ & (m^2 + 9b^2)(m^2 - 9b^2) \\ & \quad (m) (3b) \\ & (m^2 + 9b^2)(m + 3b)(m - 3b) \end{aligned}$$