

© Factorise the following.

$$(1) \ x^2 + 4x + 4$$

$$(2) \ y^2 + 10y + 25$$

$$(3) \ a^2 + 14a + 49$$

$$(4) \ 4b^2 + 12b + 9$$

$$(5) \ 9m^2 + 24m + 16$$

© Factorise the following.

$$(6) \ x^2 + 4xy + 4y^2$$

$$(7) \ a^2 + 10ab + 25b^2$$

$$(8) \ c^2 + 6cd + 9d^2$$

$$(9) \ 4m^2 + 36mn + 81n^2$$

$$(10) \ 9p^2 + 60pq + 100q^2$$

☺ Factorise the following.

$$(11) \ a^2 - 6a + 9$$

$$(12) \ m^2 - 12m + 36$$

$$(13) \ x^2 - 16x + 64$$

$$(14) \ 9b^2 - 12b + 4$$

$$(15) \ 25h^2 - 90h + 81$$

☺ Factorise the following.

$$(16) \ a^2 - 6ab + 9b^2$$

$$(17) \ x^2 - 12xy + 36y^2$$

$$(18) \ m^2 - 8mn + 16n^2$$

$$(19) \ 16a^2 - 24ab + 9b^2$$

$$(20) \ 25x^2 - 60xy + 36y^2$$

☺ Factorise the following.

$$(21) m^2 - 25$$

$$(22) k^2 - 49$$

$$(23) a^2 - 81$$

$$(24) 4x^2 - 121$$

$$(25) 16y^2 - 169$$

☺ Factorise the following.

$$(26) a^2 - b^2$$

$$(27) m^2 - 9n^2$$

$$(28) 49x^2 - y^2$$

$$(29) 36p^2 - 25q^2$$

$$(30) 81c^2 - 49d^2$$

☺ Factorise the following.

$$(31) \ 2x^2 - 8$$

$$(32) \ 3a^2 - 75$$

$$(33) \ a^2m - b^2m$$

$$(34) \ a^2b^2 - c^2d^2$$

$$(35) \ x^2y^3z - x^2yz^3$$

☺ Factorise the following.

$$(36) \ m^4 - n^4$$

$$(37) \ 16x^4 - 81y^4$$

$$(38) \ a^8 - b^8$$

$$(39) \ (x + y)^2 - (x - y)^2$$

$$(40) \ (3a - 2b)^2 - (4a + 3b)^2$$