



Name : Class :

Perfect square polynomials factoring

Factor the following perfect square polynomials

1) $n^2 - 24n + 144$

2) $p^2 - 30p + 225$

3) $x^2 + 40x + 400$

4) $18y^3 + 60y^2 + 50y$

5) $25a^2 + 10a + 1$

6) $m^2n^4 + 20mn^2 + 100$

ANSWER SHEET

Factor the following perfect square polynomials

$$1) \quad n^2 - 24n + 144 \quad \underline{\hspace{10em} (n - 12)^2 \hspace{10em}}$$

$$2) \quad p^2 - 30p + 225 \quad \underline{\hspace{10em} (p - 15)^2 \hspace{10em}}$$

$$3) \quad x^2 + 40x + 400 \quad \underline{\hspace{10em} (x + 20)^2 \hspace{10em}}$$

$$4) \quad 18y^3 + 60y^2 + 50y \quad \underline{\hspace{10em} 2y(3y + 5)^2 \hspace{10em}}$$

$$5) \quad 25a^2 + 10a + 1 \quad \underline{\hspace{10em} (5a + 1)^2 \hspace{10em}}$$

$$6) \quad m^2n^4 + 20mn^2 + 100 \quad \underline{\hspace{10em} (mn^2 + 10)^2 \hspace{10em}}$$