

Name : _____

Algebraic Identity

ES1

Expand each expression using algebraic identity.

1) $(x + 4)(x - 5)$

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

3) $(pq + 6)(pq + 3)$

4) $(7c - d)(7c + 8d)$

5) $(3y - 7)(3y + 2)$

6) $(r^2s + 1)(r^2s - 4)$

7) $(n - 8m)(n - m)$

8) $(2 + u^3)(3 + u^3)$

9) $(g + 5)(g - 3)$

10) $(k - 6)(k - 8)$

Name : _____

Answer key

Algebraic Identity

ES1

Expand each expression using algebraic identity.

1) $(x + 4)(x - 5)$

$x^2 - x - 20$

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

$a^2 - 5ab + 6b^2$

3) $(pq + 6)(pq + 3)$

$p^2q^2 + 9pq + 18$

4) $(7c - d)(7c + 8d)$

$49c^2 + 49cd - 8d^2$

5) $(3y - 7)(3y + 2)$

$9y^2 - 15y - 14$

6) $(r^2s + 1)(r^2s - 4)$

$r^4s^2 - 3r^2s - 4$

7) $(n - 8m)(n - m)$

$n^2 - 9mn + 8m^2$

8) $(2 + u^3)(3 + u^3)$

$u^6 + 5u^3 + 6$

9) $(g + 5)(g - 3)$

$g^2 + 2g - 15$

10) $(k - 6)(k - 8)$

$k^2 - 14k + 48$