

Name: _____

Factoring the Difference of Squares

Factor each completely.

(1) $20x^3 - 45$

(2) $81x^2 - 121y^2$

(3) $16x^2 - 9$

(4) $121p^2 - 49$

(5) $q^2 - 64$

(6) $9x^2 - 324$

(7) $4a^2 - 100$

(8) $a^2 - 36$

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

(10) $16v^2 - 25$

Name : _____

Factoring the Difference of Squares

Answers

(1) $20x^3 - 45$

$5(4x^3 - 9)$

(2) $81x^2 - 121y^2$

$(9x + 11y)(9x - 11y)$

(3) $16x^2 - 9$

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

(4) $121p^2 - 49$

$(11p + 7)(11p - 7)$

(5) $q^2 - 64$

$(q + 8)(q - 8)$

(6) $9x^2 - 324$

$9(x + 6)(x - 6)$

(7) $4a^2 - 100$

$4(a + 5)(a - 5)$

(8) $a^2 - 36$

$(a + 6)(a - 6)$

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

$(x + y)(x - y)$

(10) $16v^2 - 25$

$(4v + 5)(4v - 5)$