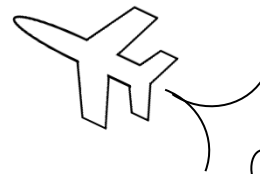


Math on the Fly!



NAME: _____ DATE: _____

Factoring Difference of Squares

Factor each expression below.

1.

$4x^2 - 9$

2.

$e^2 - 16$

3.

$a^2 - n^2$

4.

$25 - 81y^2$

5.

$x^4 - 49$

6.

$w^2 - 1$

7.

$m^2 - p^4$

8.

$100 - x^2$

9.

$x^2 - 100$

10.

$x^2 + 100$

11.

$u^4 - 144$

12.

$36 - b^4$

13.

$9x^2 - 64y^2$

14.

$1 - 25x^2$

SOLUTIONS

1.

$$4x^2 - 9$$
$$(2x + 3)(2x - 3)$$

2.

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

3.

$$a^2 - n^2$$
$$(a - n)(a + n)$$

4.

$$25 - 81y^2$$
$$(5 + 9y)(5 - 9y)$$

5.

$$x^4 - 49$$
$$(x^2 + 7)(x^2 - 7)$$

6.

$$w^2 - 1$$
$$(w - 1)(w + 1)$$

7.

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

8.

$$100 - x^2$$
$$(10 + x)(10 - x)$$

9.

$$x^2 - 100$$
$$(x + 10)(x - 10)$$

10.

$$x^2 + 100$$

Prime
(Can't be factored)

11.

$$u^4 - 144$$
$$(u^2 - 12)(u^2 + 12)$$

12.

$$36 - b^4$$
$$(6 + b^2)(6 - b^2)$$

13.

$$9x^2 - 64y^2$$
$$(3x + 8y)(3x - 8y)$$

14.

$$1 - 25x^2$$
$$(1 - 5x)(1 + 5x)$$