

U7 Review: Types of Factoring Name: KEY

① $3x^2 + 6xy$
GCF

$$3x(x + 2y)$$

② $x^2 + 5x + 4$
 $a = 1$

$$(x + 4)(x + 1)$$

③ $2xy - x^2$
GCF

$$x(2y - x)$$

④ $x^2 - 11x + 18$
 $a = 1$

$$(x - 9)(x - 2)$$

⑤ $4x^2 - 9y^2$
D.O.S.

$$(2x)^2 - (3y)^2$$

$$(2x + 3y)(2x - 3y)$$

⑥ $16x^2 - \frac{4}{16}$
D.O.S.

$$(4x)^2 - \left(\frac{2}{4}\right)^2$$

$$\left(4x + \frac{2}{4}\right)\left(4x - \frac{2}{4}\right)$$

⑦ $x^2 + 2x - 48$
 $a = 1$

$$(x + 8)(x - 6)$$

⑧ $3xy^2 - 6xy$
GCF

$$3xy(y - 2)$$

⑨ $x^2 - 8x + 12$
 $a = 1$

$$(x - 6)(x - 2)$$

DIRECTIONS

1) Label each problem with the appropriate factoring method:

GCF

- usually 2 terms
- all terms share a factor (numerical, variable, or both)

$a = 1$

- usually 3 terms
- has an x^2 or $1x^2$ term

D.O.S.

- two terms
- both terms are squares
- $(\quad)^2 - (\quad)^2$

2) Factor each using the appropriate method