

Name: \_\_\_\_\_

Date \_\_\_\_\_

Topic: Factoring Polynomials - Worksheet 1

Factor the following:

1.  $m^2 - 49$  =

2.  $x^2 - 16$  =

3.  $2(p-q) - 6a(p-q)$  =

4.  $4y(x-2y) - 1(x-2y)$  =

5.  $(x-y)(5x+2) - (x-y)(x+6)$  =

6.  $x^2 + 4x + 3$  =

7.  $7(x-5y) + 2a(x-5y)$  =

8.  $2(2x-3y) - 14(2x-3y)$  =

9.  $x^2 + 16x + 64$  =

10.  $4xy^3 - 12y^2$  =



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Topic: Factoring Polynomials - Worksheet 2

Factor the following:

1.  $y^2 - 36$  =

2.  $z^2 - 81$  =

3.  $5(p-q) - 5a(p-q)$  =

4.  $6y(x-2y) - 2(x-2y)$  =

5.  $(x-y)(9x+4) - (x-y)(x+4)$  =

6.  $5x^2 - 30x + 40$  =

7.  $9(x-3y) + 4a(x-3y)$  =

8.  $6(4x-5y) - 16(4x-5y)$  =

9.  $x^2 + 3x - 18$  =

10.  $6xy^3 - 36y^2$  =



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Topic: Factoring Polynomials - Worksheet 3

Factor the following:

1.  $x^2 - 25$  =

2.  $x^2 - 64$  =

3.  $7(p-q) - 7a(p-q)$  =

4.  $8y(x-3y) - 4(x-3y)$  =

5.  $(x-y)(10x+2) - (x-y)(x+2)$  =

6.  $x^2 - 6x + 8$  =

7.  $5(x-7y) + 6a(x-7y)$  =

8.  $2(6x-9y) - 12(6x-9y)$  =

9.  $-7x^4y^2 - 14x^2y + 21x^3y^3$  =

10.  $5xy^3 - 45y^2$  =



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Topic: Factoring Polynomials - Worksheet 4

Factor the following:

1.  $k^2 - 16$  =

2.  $j^2 - 9$  =

3.  $5(p-q) - 10a(p-q)$  =

4.  $3y(x-4y) - 8(x-4y)$  =

5.  $(x-y)(12x+2) - (x-y)(x+6)$  =

6.  $-43y^2 + 387y$  =

7.  $7(x-5y) + 3a(x-5y)$  =

8.  $8(3x-2y) - 6(3x-2y)$  =

9.  $33p^2 + 363p$  =

10.  $7xy^3 - 21y^2$  =



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Topic: Factoring Polynomials - Worksheet 5

Factor the following:

1.  $n^2 - 4$  =

2.  $a^2 - 100$  =

3.  $2(p-q) - 15a(p-q)$  =

4.  $6y(x-2y) - 9(x-2y)$  =

5.  $(x-y)(11x+4) - (x+y)(x+4)$  =

6.  $s^2 - 3s - 70$  =

7.  $9(x-3y) + 5a(x-3y)$  =

8.  $7(4x-6y) + 5(4x-6y)$  =

9.  $6b^2 + 17b + 12$  =

10.  $9xy^3 - 45y^2$  =

