

# Factoring Quadratic Expressions (A)

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

Date: \_\_\_\_\_

Factor each expression.

1.  $48x^2 - 56x - 24$

11.  $27x^2 - 279x + 504$

2.  $72x^2 - 536x + 224$

12.  $-18x^2 + 116x + 70$

3.  $-6x^2 + 384$

13.  $12x^2 + 14x - 10$

4.  $24x^2 + 28x - 196$

14.  $54x^2 + 549x + 567$

5.  $-72x^2 - 712x - 576$

15.  $24x^2 + 116x + 140$

6.  $4x^2 - 4x - 80$

16.  $-12x^2 - 10x + 8$

7.  $16x^2 - 42x - 18$

17.  $-16x^2 - 68x - 42$

8.  $-49x^2 - 413x - 168$

18.  $-48x^2 - 252x - 294$

9.  $12x^2 - 40x + 12$

19.  $3x^2 + 12x + 9$

10.  $25x^2 + 35x - 120$

20.  $56x^2 + 42x - 35$

# Factoring Quadratic Expressions (A) Answers

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

Date: \_\_\_\_\_

Factor each expression.

1.  $48x^2 - 56x - 24$

$8(3x + 1)(2x - 3)$

2.  $72x^2 - 536x + 224$

$8(x - 7)(9x - 4)$

3.  $-6x^2 + 384$

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

4.  $24x^2 + 28x - 196$

$4(3x - 7)(2x + 7)$

5.  $-72x^2 - 712x - 576$

$-8(x + 9)(9x + 8)$

6.  $4x^2 - 4x - 80$

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

7.  $16x^2 - 42x - 18$

$2(8x + 3)(x - 3)$

8.  $-49x^2 - 413x - 168$

$-7(7x + 3)(x + 8)$

9.  $12x^2 - 40x + 12$

$4(3x - 1)(x - 3)$

10.  $25x^2 + 35x - 120$

$5(5x - 8)(x + 3)$

11.  $27x^2 - 279x + 504$

$9(x - 8)(3x - 7)$

12.  $-18x^2 + 116x + 70$

$-2(9x + 5)(x - 7)$

13.  $12x^2 + 14x - 10$

$2(3x + 5)(2x - 1)$

14.  $54x^2 + 549x + 567$

$9(x + 9)(6x + 7)$

15.  $24x^2 + 116x + 140$

$4(2x + 5)(3x + 7)$

16.  $-12x^2 - 10x + 8$

$-2(2x - 1)(3x + 4)$

17.  $-16x^2 - 68x - 42$

$-2(4x + 3)(2x + 7)$

18.  $-48x^2 - 252x - 294$

$-6(4x + 7)(2x + 7)$

19.  $3x^2 + 12x + 9$

$3(x + 1)(x + 3)$

20.  $56x^2 + 42x - 35$

$7(4x + 5)(2x - 1)$