

Name:

Date: Score:

Factoring Polynomials: GCF and Quadratic Expression

Factor each expression completely

1 $2ab^2 - 14ab$

2 $5a^2 + 55a$

3 $18v^2 + 114v - 84$

4 $8x^2 + 16x$

5 $25mp^2 - 45mp$

6 $16c^2 + 48c$

7 $m^2y + 6myn + 8n^2y$

8 $-2x^2 + 8xy + 64y^2$

9 $-42x^2 + 306xy - 84y^2$

10 $-m^2v - 8mvn - 12n^2v$

11 $2y^2 + 28y + 96$

12 $5b^2k^2 + 25bk^2 - 250k^2$

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Factoring Polynomials: GCF and Quadratic Expression

Answers

1 $2ab^2 - 14ab$

$2ab(b - 7)$

2 $5a^2 + 55a$

$5a(a + 11)$

3 $18v^2 + 114v - 84$

$6(3v - 2)(v + 7)$

4 $8x^2 + 16x$

$8x(x + 2)$

5 $25mp^2 - 45mp$

$5mp(5p - 9)$

6 $16c^2 + 48c$

$16c(c + 3)$

7 $m^2y + 6myn + 8n^2y$

$y(m + 2n)(m + 4n)$

8 $-2x^2 + 8xy + 64y^2$

$-2(x + 4y)(x - 8y)$

9 $-42x^2 + 306xy - 84y^2$

$-6(7x - 2y)(x - 7y)$

10 $-m^2v - 8m^2n - 12n^2v$

$-v(m + 2n)(m + 6n)$

11 $2y^2 + 28y + 96$

$2(y + 6)(y + 8)$

12 $5b^2k^2 + 25bk^2 - 250k^2$

$5k^2(b - 5)(b + 10)$