

Factoring Practice Problems

Factor each completely.

1) $7x^2 - 8x - 12$

2) $5a^2 + 28a + 32$

3) $5n^2 - 4n - 12$

4) $3r^2 - 2r + 18$

5) $7n^2 + 4n + 4$

6) $3r^2 + 16r - 64$

$$7) 2n^2 - 7n + 5$$

$$8) 7m^2 - 6m + 12$$

$$9) 9m^2 + 70m - 16$$

$$10) 18b^2 - 111b + 18$$

Solve each equation by factoring.

$$11) 5b^2 - 13b - 6 = 0$$

$$12) 3b^2 - 10b + 8 = 0$$

Answers to Factoring Practice Problems (ID: 1)

1) $(7x + 6)(x - 2)$

5) Not factorable

9) $(m + 8)(9m - 2)$

2) $(5a + 8)(a + 4)$

6) $(3r - 8)(r + 8)$

10) $3(b - 6)(6b - 1)$

3) $(5n + 6)(n - 2)$

7) $(2n - 5)(n - 1)$

11) $\left\{-\frac{2}{5}, 3\right\}$

4) Not factorable

8) Not factorable

12) $\left\{\frac{4}{3}, 2\right\}$

Factoring Practice Problems

Factor each completely.

1) $7x^2 + 10x - 100$

2) $5r^2 + 28r - 49$

3) $3n^2 + 11n + 8$

4) $7v^2 + 45v - 28$

5) $3n^2 - 32n + 45$

6) $6x^2 - 51x + 24$

$$7) 35n^2 + 325n + 360$$

$$8) 15b^2 - 108b - 96$$

$$9) 16r^2 - 28r + 252$$

$$10) 4a^2 + 43a + 30$$

Solve each equation by factoring.

$$11) 5m^2 - 6m + 1 = 0$$

$$12) 5x^2 + x - 4 = 0$$

Answers to Factoring Practice Problems (ID: 2)

1) Not factorable

5) $(3n - 5)(n - 9)$

9) $4(4r^2 - 7r + 63)$

2) $(5r - 7)(r + 7)$

6) $3(2x - 1)(x - 8)$

10) $(a + 10)(4a + 3)$

3) $(3n + 8)(n + 1)$

7) $5(7n + 9)(n + 8)$

11) $\left\{\frac{1}{5}, 1\right\}$

4) $(7v - 4)(v + 7)$

8) $3(5b + 4)(b - 8)$

12) $\left\{\frac{4}{5}, -1\right\}$