

Practice Exercises

Factor the following polynomials completely.

1. $x^2 - 12xy + 36y^2$

2. $x^2 + 10x + 25$

3. $9a^2 - 36ab + 36b^2$

4. $3m^2 + 18mn + 27n^2$

5. $a^4c^2 - 6a^2bc + 9b^2$

Problem Set

Factor the following polynomials completely.

1. $16x^2 - 24xy + 9y^2$

2. $4x^2 + 20x + 25$

3. $49a^2 - 84ab + 36b^2$

4. $121m^4 + 66m^2n + 9n^2$

5. $64a^2 - 32ab + 4b^2$

6. $4x^4y^2 - 12x^2yz^3 + 9z^6$

7. $9x^2y^2 + 30xyz^2 + 25z^4$

8. $16x^4 - 24x^2y + 9y^2$

9. $36x^2 - 84xy^3 + 49y^6$

10. $4x^2 + 28x + 49$

Problem Set

1. $(4x - 3y)^2$

2. $(2x + 5)^2$

3. $(7a - 6b)^2$

4. $(11m^2 + 3n)^2$

5. $4(4a - b)^2$

6. $(2x^2y - 3z^3)^2$

7. $(3xy + 5z^2)^2$

8. $(4x^2 - 3y)^2$

9. $(6x - 7y^3)^2$

10. $(2x + 7)^2$