Polynomial Practice

Simplify the following polynomials as much as you can. SHOW your work to receive credit.

1.
$$3x^2(2y + 5x)$$

2.
$$xy(5x^2 + 8x - 7)$$

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 3. $-4c^2d^3(5cd^2 + 3c^2d)$

4.
$$2xy(3x^2 - xy + 7)$$

5.
$$xy^2(x^2+3xy+9)$$

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 6. $2r^2(6r^3 + 14r^2 - 30r + 14)$

7.
$$-3x(8x^2 + xy - 5y^2)$$

7. $-3x(8x^2 + xy - 5y^2)$ 8. $-7x^2y^4(-3x^2 + 6xy - 4y^2)$ 9. $-8mn^5(5m^2 + 5mn + n^2)$

10.
$$-5xy^2(-8x^2 + xy - 8y^2)$$

Answer:

Simplify the following polynomials as much as you can. SHOW your work to receive credit.

11.
$$-7xy^3(-2x^2+4xy+4y^2)$$
 12. $-3y(-6x^2+xy-6y^2)$ 13. $4n(-5m^2-8mn+6n^2)$

12.
$$-3y(-6x^2 + xy - 6y^2)$$

13.
$$4n(-5m^2 - 8mn + 6n^2)$$

Answer: _____

14.
$$4x^2y^2(-8x^2 + 3xy + 7y^2)$$
 15. $-7(-4u^2 - 2uv + 2v^2)$ 16. $8n(-3m^2 + 3mn + 6n^2)$

15.
$$-7(-4u^2 - 2uv + 2v^2)$$

16.
$$8n(-3m^2 + 3mn + 6n^2)$$

Answer: _____

17.
$$6a(a^2 - 8ab + 4b^2)$$
 18. $-x^3y^2(2x^2 + 7xy - 3y^2)$ 19. $-8a^3b(8a^2 + 6ab - 5b^2)$

18.
$$-x^3y^2(2x^2 + 7xy - 3y^2)$$

19.
$$-8a^3b(8a^2+6ab-5b^2)$$