

Unit6 Test Review - Polynomials
A.APR, A.SSE.2

Name _____

1. Name each polynomial

a) $5y$

b) $3x^2 - 5$

c) $9x^4 - 25x + 3$

d) $3x - 2$

Add or Subtract.

2. $(3y^2 + 9) + (11y^2 - 8y + 1)$

3. $(10x^2 - 7x + 1) - (2x^2 + 7x + 4)$

4. $7a - 16a^2 + 6 + 3a^2 - 5a$

5. $(3x^2 - 7) - (4x^2 + 12x - 2)$

Multiply.

6. $6x^2(4x^3 + 7x - 9)$

7. $(x - 9)(x - 2)$

8. $(x + 5)^2$

9. $(x + 3)(4x^3 - 2x + 5)$

10. $(2x + 4)(x - 3)$

11. $-3d(d^6 + 3d^2 - 7d - 2)$

Factor each polynomial.

12. $2p^3 - 6p^2 - 5p + 15$

13. $m^5 - 8m^2$

Factor each polynomial.

14. $y^2 + 17y + 30$

15. $c^2 - 5c - 24$

16. $x^2 - 11x + 18$

17. $36y^2 - 81$

18. $10a^2 + 11a + 3$

19. $3x^2 - 14x + 16$

20. $5x^2 + 9x - 18$

21. $4x^2 + 28x + 49$

Factor each polynomial completely.

22. $100x^2 + 1$

23. $8p^2 - 18$

24. $9p^6 + 30p^5 + 24p^4$

25. $2p^5 + 10p^4 - 12p^3$

26. $3x^2 - 9x - 84$

27. $mw^2 + 3w^2 - 36m - 108$