

Q3 - Homework 1 - Worksheet 8-5 to 8-7

Simplify each expression.

1) $(3n^2 - 1) + (n^4 + 2n^2)$

2) $(2n + 4) - (n + 1)$

3) $(11 - 5a^4 + 5a^3) + (-2 + 8a^4 + 11a^3)$

4) $(14x - 9x^2 - x^3) + (-x^2 - 8x + 3x^3)$

5) $(12x - 9x^4 + 11x^5) + (5x^4 + 7x^5 + 8x)$

6) $(12 - 13n + 13n^2) - (n^5 - 5n^2 - 3n)$

7) $(6b + 10) + (-11 + 5a^2b^2 + 3b) - (4a^2b^2 - 2)$

8) $(-3y^2 + 5xy) - (8y^2 + 6xy - 5) - (-4 + 4xy)$

Find each product.

9) $5a^2(4a + 1)$

10) $5(4m - 1)$

11) $3x^3(4x - 4)$

12) $4p(p + 4)$

13) $\frac{3a}{4} \left(-\frac{5}{2}a - \frac{19}{6} \right)$

14) $-\frac{19n}{6} \left(\frac{13}{6}n - \frac{3}{2} \right)$

15) $(2n + 2)(-2n - 6)$

16) $(-5x - 6)(3x + 4)$

17) $(-3a - 8)(3a - 5)$

18) $(6k - 7)(8k - 4)$

19) $(8r - 8)(-r + 1)$

20) $(6r + 8)(-8r - 8)$

21) $(v - 3)(5v^2 - 4v - 7)$

22) $(5p - 7)(-3p^2 + 3p + 2)$

23) $(4a^2 + 6a - 5)(4a^2 - 2a - 6)$

24) $(-7v^2 - 7v + 8)(2v^2 - v + 4)$

Tip:
"Foil"

Line-up
Like
Terms
Vertically