

Day 1 Homework

Simplify each expression by combining like terms.

1) $7 - 3b + 8b + 8$

2) $6n + n$

Simplify by eliminating grouping symbols and adding like terms.

3) $-5(m - 2) + 5m$

4) $-4 + 3(8k - 7)$

Find each product.

5) $5a^2(7a - 4)$

6) $2b(2b - 7)$

7) $(6r - 5)(r - 1)$

8) $(7x - 8)(8x + 1)$

9) $(8x - 5)(4x - 7)$

10) $(4a - 3)(3a - 8)$

11) $4x^2(2x^2 + 7x + 2)$

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

Simplify by eliminating grouping symbols and adding like terms.

13) $(5 + n^3) + (-8 + 5n^3 + 2n^2)$

14) $(-3x - 8x^3) - (-x^2 + 6x - 6x^3)$

15) $(8a^3 + 3a^2 - 4) + (4 - 3a^3 + 5a^2)$

16) $(m + 7m^3 + 6) - (-5m^3 - m + 8)$

Name each polynomial by degree and number of terms.

17) $8n$

18) $-9p^2 + 10p^3 + 3 - 7p$

19) $-4n^2 + 4n$

20) $-7a^2$

21) $-8 - 3x$

22) 1

Factor the greatest common factor out of each expression.

23) $21n - 35$

24) $20m^2 + 24m$

25) The area of a rectangle is found using the formula $A = l \cdot w$, where l is the length of the rectangle and w is the width. Find the area of the rectangle with the given lengths and widths.

$l = x + 14$; $w = 3x + 1$

26) The perimeter of a rectangle is found using the formula $P = 2l + 2w$, where l is the length of the rectangle and w is the width. Find the perimeter of the rectangle with the given lengths and widths.

$l = x + 14$; $w = 3x + 1$