

Practice: Add and Subtract Polynomials

- Which expression represents the result of simplifying $(3x - 4) + (2x + 1)$?
 A $6x - 4$ B $6x + 4$
 C $5x + 3$ D $5x - 3$
- Remove brackets and collect like terms. Then, simplify.
 - $(x + 3) + (x + 5)$
 - $(2y - 5) + (y + 9)$
 - $(5m + 1) + (2m + 2)$
 - $(3 - 4d) + (d - 1)$
 - $(3v - 2) + (6 - v)$
 - $(k + 4) + (2 - 3k) + (6k - 1)$
 - $(2p + 4) + (p - 2) + (8 - 3p)$
 - $(3 - r) + (4 + 5r) + (2r - 1)$
- Write the opposite of each expression.
 - 3 b) -5
 - $2p$ d) $-x$
 - $m + 4$ f) $3b - 1$
 - $x^2 + 2x - 4$ h) $-6 - y^2$
- Which expression represents the result of simplifying $(4x - 1) - (x + 1)$?
 A $5x + 2$ B $3x - 2$
 C $5x$ D $3x$
- Add the opposite. Then, simplify.
 - $(4d - 2) - (d + 1)$
 - $(3x - 4) - (x + 3)$
 - $(2p + 5) - (3p + 2)$
 - $(8 - 4m) - (m - 2)$
 - $(a - 2) - (5 - 3a)$
 - $(z + 7) - (4 - z)$
 - $(p + 1) - (p - 2)$
 - $(5 - 2b) - (6 + 4b)$
- Simplify.
 - $(6k - 4) + (2k + 4)$
 - $(n + 3) + (3n - 5)$
 - $(2a + 1) - (4a + 2)$
 - $(5 - 3m) + (2m - 1)$
 - $(b - 6) - (2 - 5b) + (b + 4)$
 - $(x + 2) - (1 - x) - (5 + x)$
 - $(g + 12) + (g - 7) - (2 - 3g)$
 - $(1 - b) + (3 + 2b) - (b - 8)$
- Simplify.
 - $(x^2 + 2x + 1) + (2x^2 + 4)$
 - $(4a + 3b - 6) + (2a - b + 4)$
 - $(2m^2 + m + 12) + (3m^2 + 4m - 6)$
 - $(5n + mn - 3m) + (2m - 5mn + n)$
- A rectangle has length $4x + 1$ and width $x + 2$.
 - Write a simplified expression for the perimeter of the rectangle.
 - Find the perimeter of the rectangle when $x = 5$.
- Three artists contributed to a coffee-table book. They each chose to be paid a different way.

Artist	Fixed Rate (\$)	Royalty (\$ per n books sold)
Ayesha	1000	$2n$
Jorge	-	$5n$
Ioana	4000	-

 - Write an expression for the total earnings for each artist.
 - Write a simplified expression for the total amount paid to Ayesha, Jorge, and Ioana.