

5.3 Adding & Subtracting Polynomials

Ex 1: Add Polynomials

Add $3x-4$ and $2x+5$.

Method 1: Modelling

$$5x + 1$$

Method 2: Algebraically

$$\begin{array}{r} 1(3x-4) + 1(2x+5) \\ 3x-4 + 2x+5 \\ \hline 5x+1 \end{array}$$

SYK: a) $(2a-1) + (6-4a)$

b) $(3t^2 - 5t) + (t^2 + 2t + 1)$

Ex 2: Opposite Expression

What is the opposite of each?

a) $3x$ $-3x$

b) -2 $+2$

c) $4x-1$ $-4x+1$

d) a^2-3a+2 $-a^2+3a-2$

SYK: a) x

b) $5-3x$

c) $7x^2+5x-1$

Ex 3: Subtract Polynomials

Subtract $2x+3$ from $3x-4$.

$$\begin{array}{r} 1(3x-4) - 1(2x+3) \\ 3x-4 \quad -2x-3 \\ \hline x-7 \end{array}$$

When subtracting,
 - keep 1st polynomial
 - switch $-$ to $+$
 - make 2nd opposite

SYK: a) $(2x-3) - (-x+2)$

$$\begin{array}{r} (3x-4) + (-2x-3) \\ \hline x-7 \end{array}$$

