Example 1: Name Polynomials by the Number of Terms

For each expression, identify the number of terms and whether it is a monomial, binomial, trinomial or polynomial.

expression	number of terms	name
1a $4xy + 3$	2	binomial
1b $7a^2 - ab + b^2$	3	trinomial
1c $5x^2 + y^2 + z^2 - x - 6$	5	polynomial
1d 13	1	monomial
SYK1 $5j^2$		
SYK2 $3 - m^2$		
SYK3 $ab^2 - ab + 1$		
SYK4 $-4x^2 + xy - y^2 + 10$		

Example 2: Identify the Number of Terms and Degree of a Polynomial

What is the number of terms and the degree of each polynomial?

expression	number of terms	degree
2a $4x^2 + 3$	2	$2, 0 = 2$
2b $7a^2 - 2ab + b^2$	3	$2, 2, 2 = 2$
2c $5x + z + 6$	3	$1, 1, 0 = 1$
2d 7	1	0
SYK1 $1 - 3x$		
SYK2 $4x - 3xy + 7$		
SYK3 $-27b^2$		
SYK4 99		

Ex 3: Model Polynomials.

Algebra Tiles Key
Constant tiles → Number
X-tile → variable
x^2-tile → variable squared

■ = positive
□ = negative
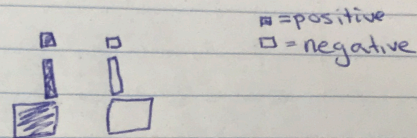
a) $3x + 2$

b) $4x^2 - 3x + 3$

c) $2x^2 + 3 - x$

d) $-x^2 + 4x - 3$

e)

$-2x^2 + 4x - 3$

f)

g)

h)