Degree of term – the sum of the exponents of the variables in one term.

eg. $2b^3$ degree = 3

$6a^4b^7$ degree = $4+7 = 11$

$8c^2t^1$ degree = $2+1 = 3$

43 degree = 0 ⓧ no variables

Degree of a polynomial – the degree of the highest degree term in a polynomial.

eg. $4x^2 + x^1$ deg = 2

(2 ↑ highest) (1)

$f^2g^1 + h^4 - 7z^1$ deg = 4

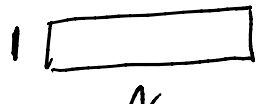
(3) (4 highest) (1)

$m^3 - 8t^2t^3 + 3z^6 - 4a^4b^1$ deg = 6

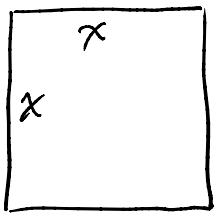
(3) (5) (6) (5)

deg = 6

Algebra Tiles



x

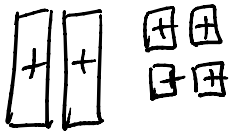


x^2

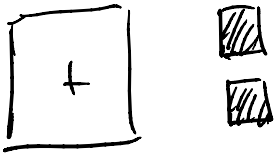
1

represent

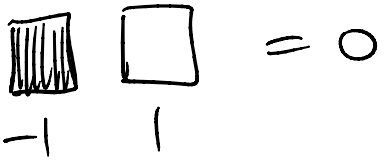
$2x+4$

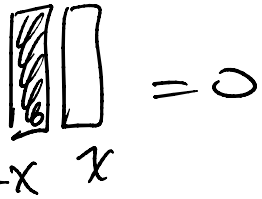


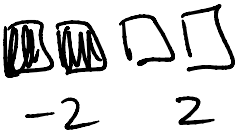
x^2-2



represent "0"







equal amount of + and − of the same tile

Substitution and Evaluate

1. $3x+5$

i) $x=2$ $\quad 3(2)+5=11$

ii) $x=-2$ $\quad 3(-2)+5=-1$

2. $x^2 + 2x$

i) $x = 1$

$(1)^2 + 2(1)$

$= 1 + 2 = 3$

ii) $x = -3$

$(-3)^2 + 2(-3)$

$= 9 + (-6)$

or $9 - 6 = 3$

3. $-2x^2 + x - 3$

$x = -2$

$-2(-2)^2 + (-2) - 3$

$= -2(4) + (-2) - 3$

$= -8 - 2 - 3$

$= -13$

p 101 # 3, 7, 8, 11, 12, 15, 17

finish 9

p 99 # 6, 7, 8 only ab