The graph of an equation containing |x| or |x |

always turns out to be a V-SHAPE

These are called Absolute Value Equations

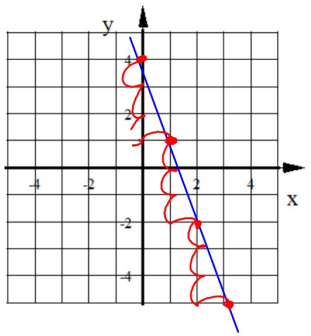
The graph of an equation containing x^2 or $(x\ )^2$

always turns out to be a PARABOLA

These are called Quadratic Equations

Graph this equation:

y = -3x + 4



The graph of an equation looking like y = mx + b

always turns out to be a LINE

slope

y-intercept

These are called Linear Equations

Functions in Algebra 1:

Linear Functions:

EQ: $y = mx + b$

Graph: Line

Absolute Value Functions:

EQ: $y = a|x - h| + k$

Graph: V-Shape

Quadratic Functions:

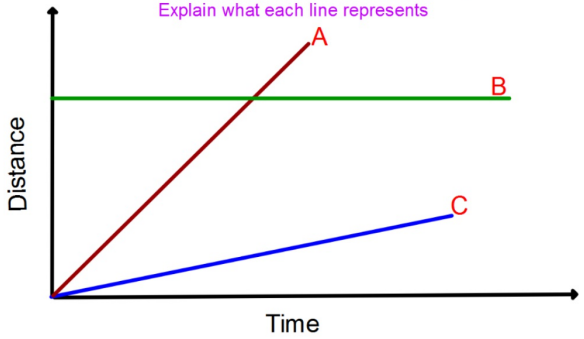
EQ: $y = ax^2 + bx + c$
or
$y = a(x - h)^2 + k$

Graph: Parabola

Section 5-1: Relating Graphs to Events

The graph below shows the distance a person travels as a function of the amount of time they've been traveling.

Explain what each line represents



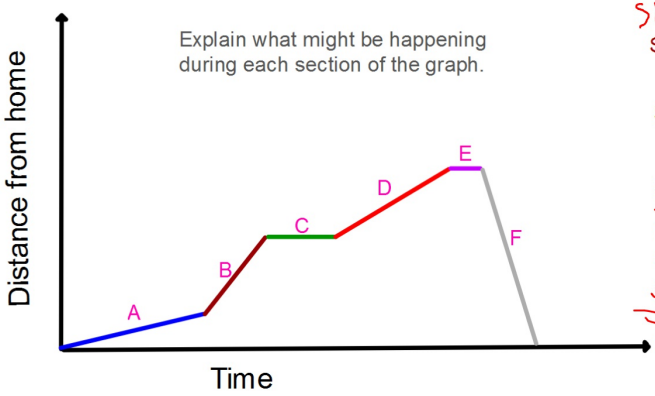
Section A moving fast

Section B NOT moving

Section C moving slower

Iman left home to go for a walk. The graph below shows her distance from home as a function of time.

Explain what might be happening during each section of the graph.



Section A Slowly running

Section B Running away from home.

Section C NO Movement

Section D Jogging Away From Home

Section E Stopped

Section F Fast Sprinting back home