

# Today's Learning Goal(s):

By the end of the class, I will be able to:

- a) represent and interpret quadratic functions in a number of different forms.

## 3.1 Properties of Quadratic Functions

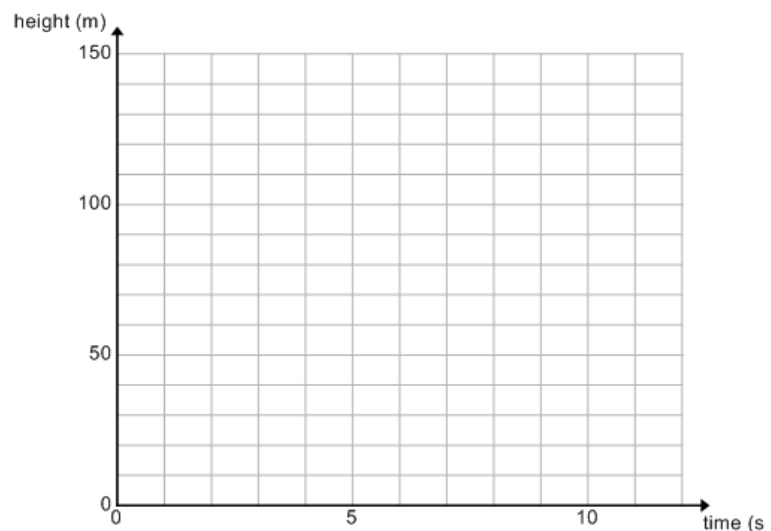
Date: \_\_\_\_\_

Ex. 1: A rocket is launched. It's height is given by the following table.

t (sec)	0	1	2	3	4	5	6	7	8	9	10
height (m)	0	44.1	78.4	102.9	117.6	122.5	117.6	102.9	78.4	44.1	0

- a) What type of relation is this? How can you tell?

- b) Graph the relation.



Today's Homework Practice includes: **READ pp. 140-145**  
p. 138 #1 – 7, p. 139 A – F, pp. 145-146 #1 – 8, 9ac, 10  
[Use Google Classroom Link to watch video proof](#)

c) Find the equation of the relation.

Vertex form

Factored form

the equation is

the equation is

Ex. 2: For the relation, create a difference table and use it to find the equation.

$x$	0	1	2	3	4	5	6
$y$	15	0	-9	-12	-9	0	15