

# A: Exploring Integer Multiplication Continued

## Examples:

1. Use the multiplication of two integers to represent each situation. Then determine the product & explain its meaning.

a. The temperature decreased for 4h at 4°C per hour.

$$(-4) \times (+4) = -16 \text{ (multiplication of two integers)}$$

The temperature decreased 16°C in 4 h. (meaning)

b. You are paid 5 instalments of \$10 each.

$$(+5) \times (+10) = +50$$

You are paid a total of \$50.

2. A building has 12 storeys above ground and 2 storeys below ground. Each storey has a height of 5m.

a) What is the total height of the building above ground?

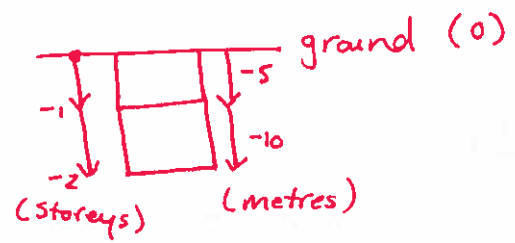
$$(+12) \times (+5) = +60$$

The height above ground is 60m

b) What is the total depth below ground?

$$(-2) \times (-5) = +10$$

The depth below ground is 10m.



3. Show how doubling an integer does not always produce a larger integer.

positive integer doubling

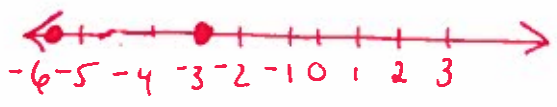
$$(+3) \times (+2) = +6$$

doubling a +ive integer produces a larger integer.

-ive integer doubling

$$(-3) \times (+2) = -6$$

doubling a -ive integer produces a smaller integer.



Assignment Pg: 292 #14-18