Math 4CST Properties of Functions.   Name: _____
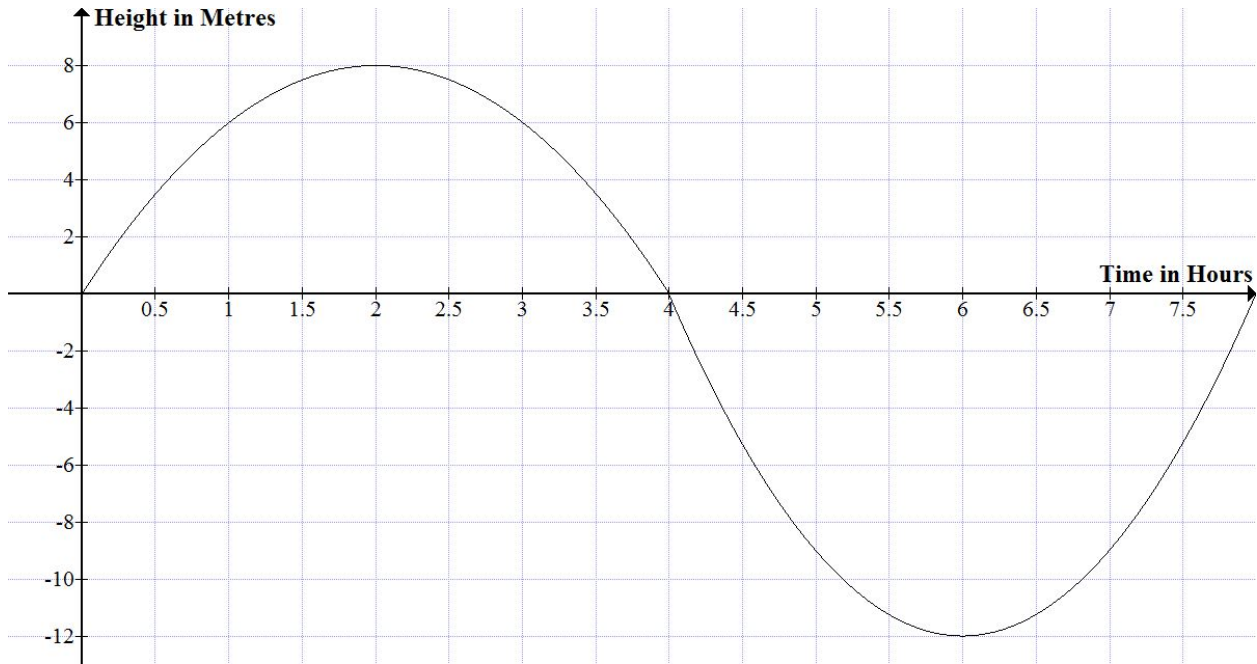
Variation of a Function (Increasing, Decreasing, Constant)

1. The height of a dolphin's dive is modelled by the function below.

What was the initial height of the dive? _____
(ie: initial value?)

Over what interval(s) was the height of the dolphin's dive increasingl?

_____

(ie: When is this function increasing?)

When did it reach its maximum? _____

Over what interval(s) was the height of the dolphin's dive decreasing?
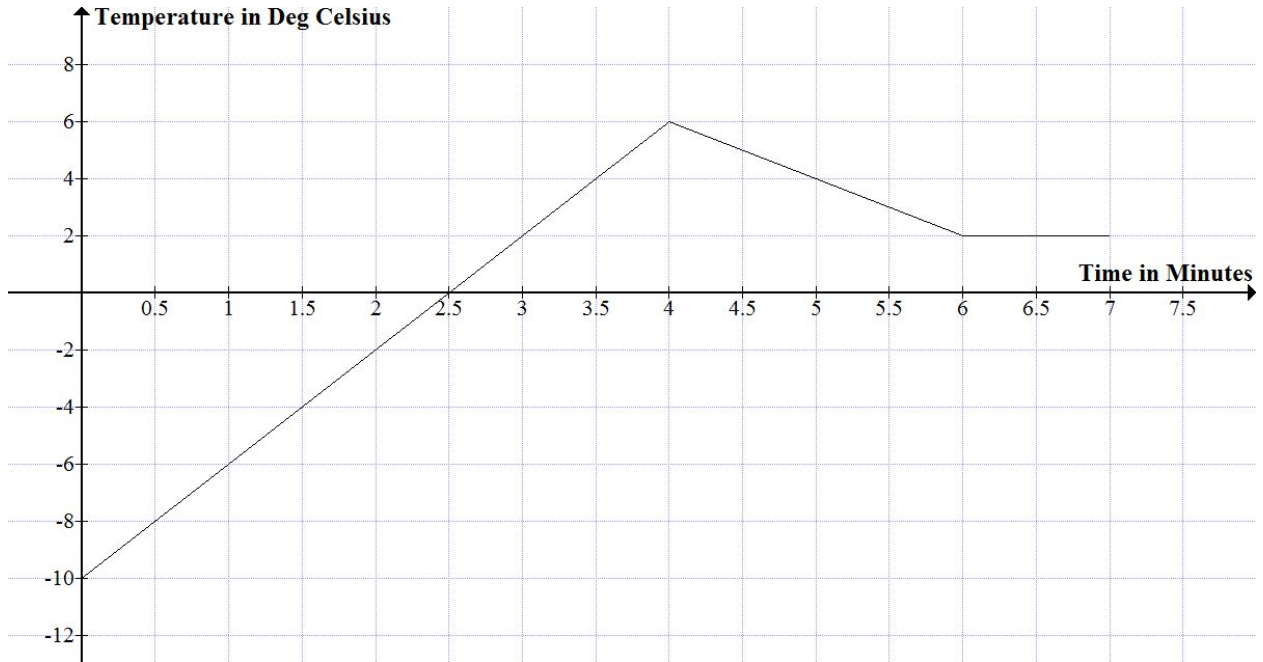
_____

(ie: When is this function decreasing?)

When did it reach its minimum? _____

When was the height of the dolphin's dive constant? _____

(ie: When is this function constant?)

2. The temperature of a substance during an experiment is recorded in the graph below.

What was the initial temperature of the substance? _____
(ie: initial value?)

Over what interval(s) was the temperature increasingl? _____

(ie: When is this function increasing?)

When did it reach its maximum? _____

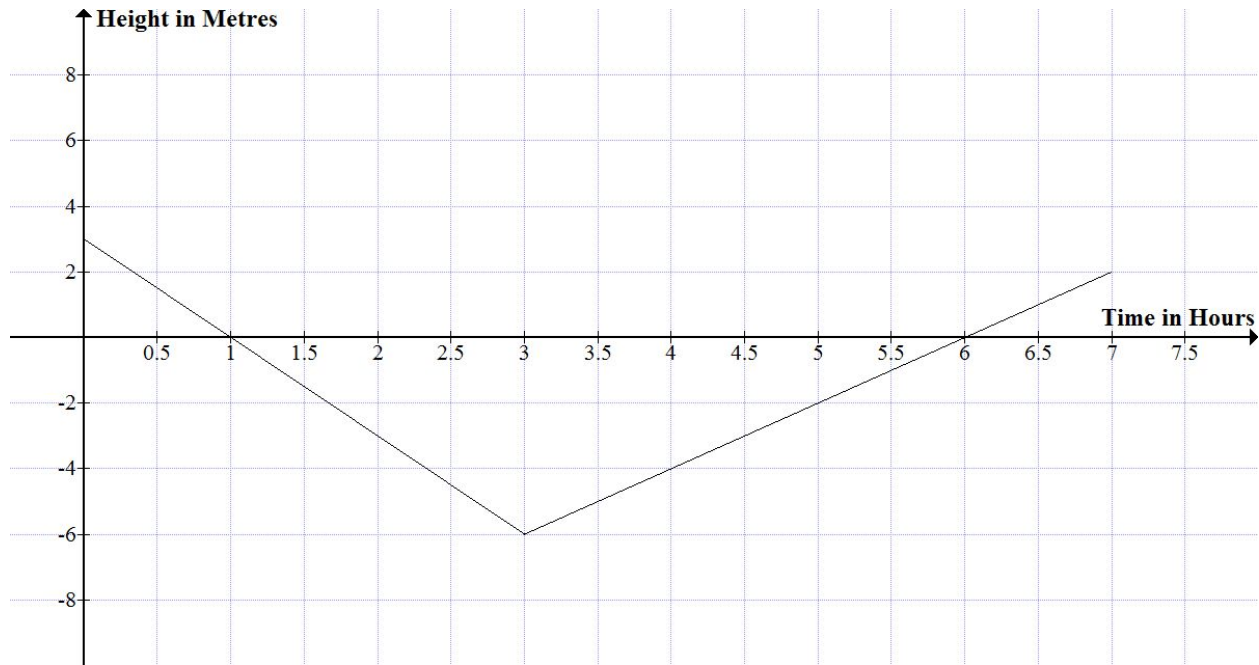Over what interval(s) was the temperature decreasing? _____

(ie: When is this function decreasing?)

When did it reach its minimum? _____

When was the temperature constant? _____

(ie: When is this function constant?)

3. The height of spelunkers as they explore caves is recorded in the graph below.

What was the initial height of the spelunkers? _____
(ie: initial value?)

Over what interval(s) was the height of the spelunkers increasingl? _____
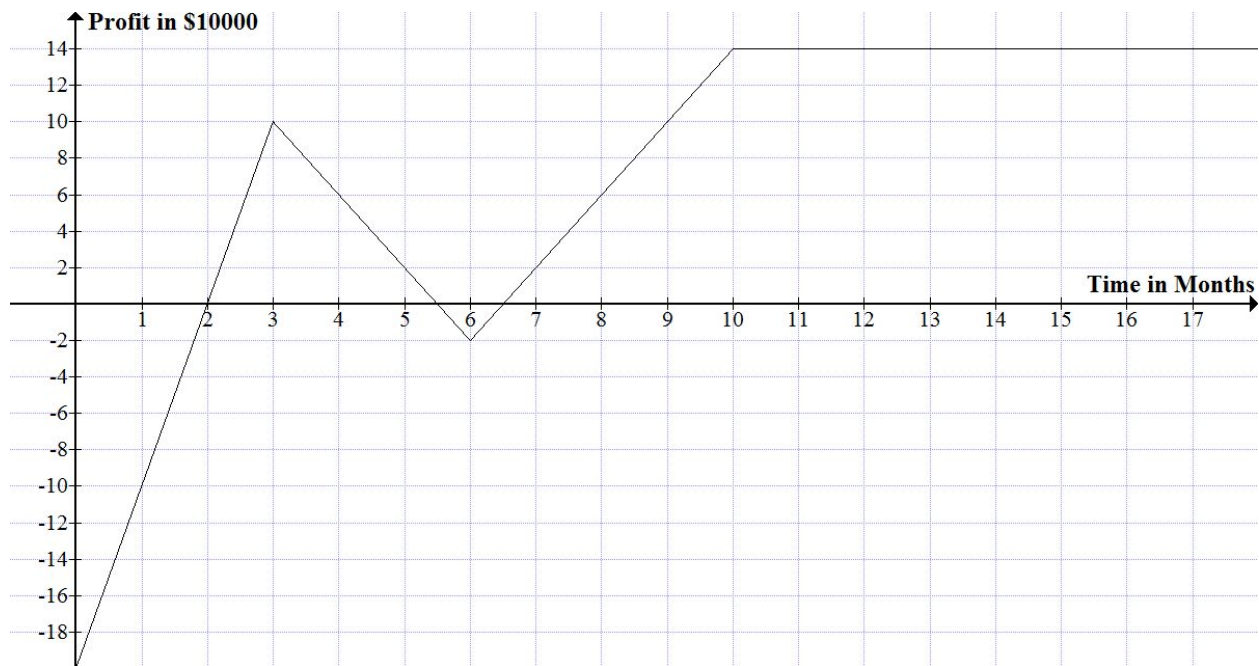
(ie: When is this function increasing?)

When did they reach their maximum? _____

Over what interval(s) was the height of the spelunkers decreasing? _____

(ie: When is this function decreasing?)

When did they reach their minimum? _____

When was the height of the spelunkers constant? _____

(ie: When is this function constant?)

4. The profit recorded by a new company is shown in the graph below.

What was the company's initial profit? _____
(ie: initial value?)

Over what interval(s) was the company's profit increasingl? _____

(ie: When is this function increasing?)

When did it reach its maximum? _____

Over what interval(s) was the company's profit decreasing? _____

(ie: When is this function decreasing?)

When did it reach its minimum? _____

When was the company's profit constant? _____

(ie: When is this function constant?)