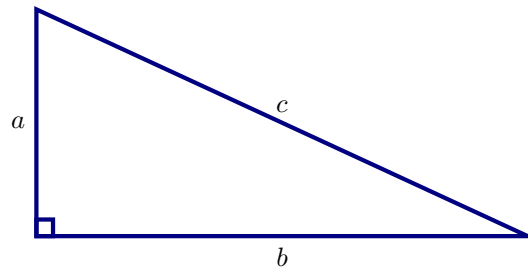


First example

In this activity we see some examples.

To start we can have theorem environments:

Theorem 1. *Given a right triangle drawn with TikZ:*



We have that:

$$a^2 + b^2 = c^2$$

As well as example environments.

Example 1. *For example, this is an example.*

There are exercises you can do:

Exercise 1 $3 \times 2 = \boxed{6}$

Some exercises can have hints.

Exercise 2 *Given that $r(v) = -2v^2 - 4v - 4$, evaluate $r(-0.4)$. Express your answer in decimal notation.*

Hint: $r(-0.4) = -2(-0.4)^2 - 4(-0.4) - 4$.

Hint: $r(-0.4) = -2.72$.

The value of the function $r(v) = -2v^2 - 4v - 4$, evaluated at $v = -0.4$, is $\boxed{-2.72}$.

Learning outcomes: Understand a first example of the Ximera style. Have a nice basic example to work from.

First example

Question 3 What is the worst kind of cat?

Multiple Choice:

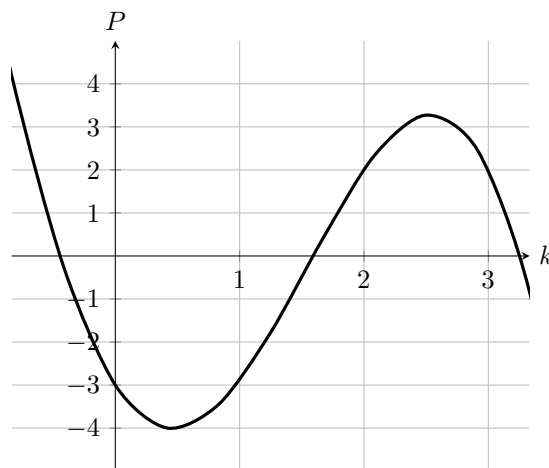
- (a) tabby
- (b) puppy ✓
- (c) dog
- (d) kitten
- (e) main coon

Hint: It is not a cat or a type of cat.

Hint: It is a puppy!

It is also possible to have a list of questions which get shuffled:

Question 4.1 In the plot below, is P a function of k ?



Multiple Choice:

- (a) Yes. ✓
- (b) No.

First example

Hint: For each input, how many outputs are there?

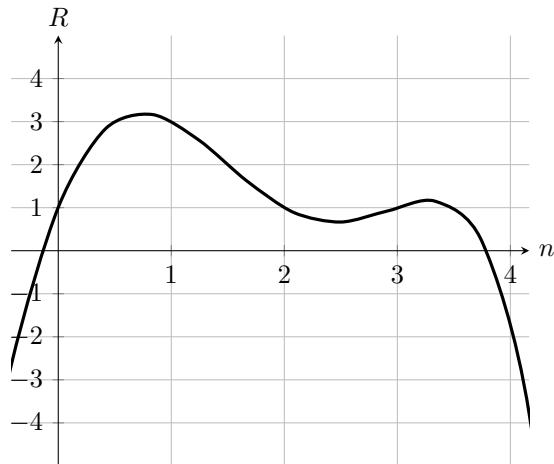
Use the plot to compute $P(2)$.

Hint: To start, find 2 on the horizontal axis.

Hint: Now from this position, move up or down until you reach the curve. The value of $P(2)$ is the height of the curve at the point $k = 2$.

The value of $P(2)$ is .

Question 4.2 In the plot below, is R a function of n ?



Multiple Choice:

- (a) Yes. ✓
- (b) No.

Hint: For each input, how many outputs are there?

Use the plot to compute $R(3)$.

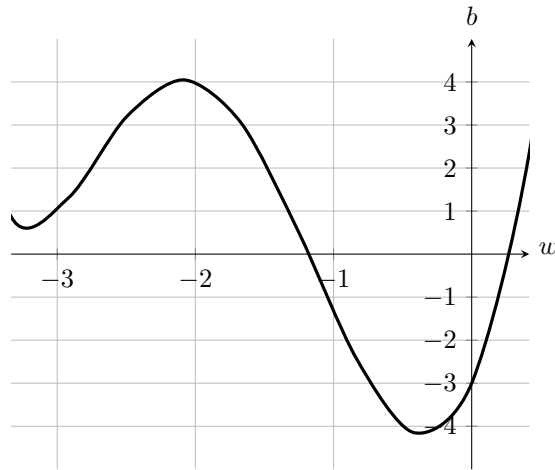
Hint: To start, find 3 on the horizontal axis.

Hint: Now from this position, move up or down until you reach the curve. The value of $R(3)$ is the height of the curve at the point $n = 3$.

First example

The value of $R(3)$ is .

Question 4.3 In the plot below, is b a function of w ?



Multiple Choice:

- (a) Yes. ✓
- (b) No.

Hint: For each input, how many outputs are there?

Use the plot to compute $b(-2)$.

Hint: To start, find -2 on the horizontal axis.

Hint: Now from this position, move up or down until you reach the curve. The value of $b(-2)$ is the height of the curve at the point $w = -2$.

The value of $b(-2)$ is .

Question 5 Enter the matrix $\begin{bmatrix} x & y \\ xy & z+1 \end{bmatrix}$

Matrix Answer
`correctMatrix = [['x','y'],['xy','z+1']]`