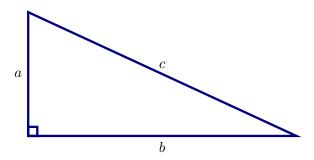
First example

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

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

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

Question 3 What is the worst kind of cat?

Multiple Choice:

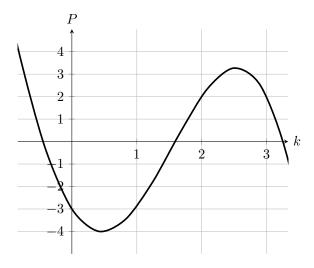
- (a) tabby
- (b) puppy ✓
- (c) dog√
- (d) kitten ✓
- (e) main coon √

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. \checkmark
- (b) No. ✓

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 $\boxed{2}$.

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

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