

## Lab 1 review

Discuss the following recall questions with your partner(s):

- Describe the input to the `model` function in Lab 1. What information does it contain? What was its shape?
- Describe the output of the `model` function. What information does it contain? What was its shape?
- Draw a diagram that illustrates the relationship between the training images, training labels, model, validation images, and validation labels. Label what part corresponds to **training** and what part corresponds to **inference** (in the machine learning sense).
- What part of your answers above would change if we had 10 classes instead of 5?
- What part of your answers above would change if we used grayscale images instead of color images?

## Dot Product Application

Suppose an image is represented by the vector  $v = [3, -1, 2, 4]$ . Write two different vectors,  $a$  and  $b$ , so that  $v \cdot a$  is larger than  $v \cdot b$ . See how many different pairs your group can come up with in 2 minutes!

Before you leave, pick a couple of these questions to react to:

- What was the most important concept from today for you?
- What was the muddiest concept today?
- How does what we did today connect with what you've learned before?
- What would you like to review or clarify next time we meet?
- What are you curious, hopeful, or excited about?