```{r, rtip2, eval = FALSE, echo = FALSE}

To make the unshown parameters equal to the values in `chosen\_params`, set `fixed\_vals` to `chosen\_params[!names(chosen\_params) %in% c('beta1', 'gamma')]`

```

```{task}

The argument `fixed\_vals` allows us to change where to slice the parameters that are not shown in the plots. Try changing this argument: what happens if we set all hidden parameters equal to the values in `chosen\_parameters`? What do you expect the emulator expectation to be in this case?

``{info, title = "R tip", collapsible = TRUE, ref.label = "rtip2"}

``

```

```{solution}

When slicing at the values of `chosen\_parameters` we would expect the emulator expectation to be somewhere close to the target ($444.23$) when $\beta\_1$ and $\gamma$ are equal to their values in `chosen\_params`, i.e. $0.214$ and $1/14$. Let us plot the emulator expectation with the `emulator\_plot` function and add the point $(\beta\_1=0.214,\gamma=1/14)$ with `geom\_point`:

``{r fig.width = 10, fig.height = 7}

emulator\_plot(ems\_wave1$R200, params = c('beta1', 'gamma'),

fixed\_vals = chosen\_params[!names(chosen\_params) %in% c('beta1', 'gamma')])+

geom\_point(aes(x=0.214, y=1/14), size=3)

``

The plot is in agreement with our reasoning: when $\beta\_1$ and $\gamma$ are equal to $0.214$ and $1/14$, the emulator expectation is around in the interval $[443,446]$ (see black point in the box). It is worth noting that when using a real, more complex model, we would not necessarily expect the emulated output at wave zero to be as close to the model output as it is for the synthetic model we chose for this workshop.

```