My first equation is F = ma. My second is a = F/m. The third is

$$a = F/m$$
.

My fist equation is F = ma. My second is

$$a = F/m$$

. Some text here. I want to write enough that there will be a few lines after the displayed equation blah blah blah.

My fist equation is F = ma. My second is

$$a = F/m. (1)$$

The period is in the right place. I have placed it inside the displayed equation (1). I want to write enough that there will be a few lines after the displayed equation blah blah blah.

$$F = ma (2)$$

is the same as

$$a = F/m. (3)$$

The period is in the right place. I have placed it inside the displayed equation (3). I want to write enoug that there will be a few lines after the displayed equation. I added equation (2).