



# 8-NS Calculating and Rounding Numbers

## Task

Lucia's calculator gives a value of

$$3.14159265$$

for  $\pi$ .

a. Is the equation

$$\pi = 3.14159265$$

valid? Explain.

b. When Lucia computes  $\pi^2$  on her calculator, using the  $\pi$  and square buttons, it shows

$$9.86960440.$$

On the other hand, when she calculates  $(3.14159265)^2$  on her calculator it shows

$$9.86960438.$$

Explain why the calculator shows different answers for what appears to be the same quantity.

