

Recurring Products

I want to investigate whether multiplying recurring decimals produces a recurring answer.

The trouble is that I am struggling to put the decimals into my calculator.

Can you help me convert all the decimals to fractions so that I can easily put them in my calculator?

Problem 1:

$$0.\dot{7} \times 0.\dot{1}\dot{8}$$

Problem 2:

$$0.\dot{3}\dot{9} \times 0.\dot{4}0\dot{6}$$

Problem 3:

$$0.0\dot{4} \times 0.\dot{3}85\dot{4}$$

Problem 4:

$$0.0\dot{5}\dot{3} \times 0.7\dot{4}$$

Problem 5:

$$0.35\dot{6} \times 0.7\dot{3}64\dot{2}$$