

**** Mathematical Weekly ****

Week 37

"12345679" is a magic number, in which "8" is missing.

$$12345679 \times 9 \times 1 = 111111111$$

$$12345679 \times 9 \times 2 = 222222222$$

$$12345679 \times 9 \times 3 = 333333333$$

$$12345679 \times 9 \times 4 = 444444444$$

$$12345679 \times 9 \times 5 = 555555555$$

$$12345679 \times 9 \times 6 = 666666666$$

$$12345679 \times 9 \times 7 = 777777777$$

$$12345679 \times 9 \times 8 = 888888888$$

$$12345679 \times 9 \times 9 = 999999999$$

$$12345679 \times 3 \times 1 = 037037037$$

$$12345679 \times 3 \times 2 = 074074074$$

$$12345679 \times 3 \times 3 = 111111111$$

$$12345679 \times 3 \times 4 = 148148148$$

$$12345679 \times 3 \times 5 = 185185185$$

$$12345679 \times 3 \times 6 = 222222222$$

$$12345679 \times 3 \times 7 = 259159259$$

$$12345679 \times 3 \times 8 = 296296296$$

$$12345679 \times 3 \times 9 = 333333333$$

$$12345679 \times 10 = 123456790$$

$$12345679 \times 19 = 234567901$$

$$12345679 \times 28 = 345679012$$

$$12345679 \times 37 = 456790123$$

$$12345679 \times 46 = 567901234$$

$$12345679 \times 55 = 679012345$$

$$12345679 \times 64 = 790123456$$

$$12345679 \times 73 = 901234567$$

$$12345679 \times 9 = 111111111$$

$$12345679 \times 99 = 1222222221$$

$$12345679 \times 999 = 12333333321$$

$$12345679 \times 9999 = 123444444321$$

$$12345679 \times 99999 = 1234555554321$$

$$12345679 \times 999999 = 12345666654321$$

$$12345679 \times 9999999 = 123456777654321$$

$$12345679 \times 99999999 = 1234567887654321$$

$$12345679 \times 999999999 = 12345678987654321$$