

D'après « Beauté des nombres »,

Kafemath, F. Dubois, avril 08

diapo 1

$$\begin{aligned}1 \times 8 + 1 &= 9 \\12 \times 8 + 2 &= 98 \\123 \times 8 + 3 &= 987 \\1234 \times 8 + 4 &= 9876 \\12345 \times 8 + 5 &= 98765 \\123456 \times 8 + 6 &= 987654 \\1234567 \times 8 + 7 &= 9876543 \\12345678 \times 8 + 8 &= 98765432 \\123456789 \times 8 + 9 &= 987654321 \\1234567900 \times 8 + 10 &= 9876543210 \\12345679011 \times 8 + 11 &= 98765432099 \\123456790122 \times 8 + 12 &= 987654320988 \\1234567901233 \times 8 + 13 &= 9876543209877 \\12345679012344 \times 8 + 14 &= 98765432098766 \\123456790123455 \times 8 + 15 &= 987654320987655 \\1234567901234566 \times 8 + 16 &= 9876543209876544 \\12345679012345677 \times 8 + 17 &= 98765432098765433 \\123456790123456788 \times 8 + 18 &= 987654320987654322 \\1234567901234567899 \times 8 + 19 &= 9876543209876543211 \\12345679012345679010 \times 8 + 20 &= 98765432098765432100\end{aligned}$$

diapo 2

$$\begin{aligned}1 \times 9 + 2 &= 11 \\12 \times 9 + 3 &= 111 \\123 \times 9 + 4 &= 1111 \\1234 \times 9 + 5 &= 11111 \\12345 \times 9 + 6 &= 111111 \\123456 \times 9 + 7 &= 1111111 \\1234567 \times 9 + 8 &= 11111111 \\12345678 \times 9 + 9 &= 111111111 \\123456789 \times 9 + 10 &= 1111111111 \\1234567900 \times 9 + 11 &= 11111111111 \\12345679011 \times 9 + 12 &= 111111111111 \\123456790122 \times 9 + 13 &= 1111111111111 \\1234567901233 \times 9 + 14 &= 11111111111111 \\12345679012344 \times 9 + 15 &= 111111111111111 \\123456790123455 \times 9 + 16 &= 1111111111111111 \\1234567901234566 \times 9 + 17 &= 11111111111111111 \\12345679012345677 \times 9 + 18 &= 111111111111111111 \\123456790123456788 \times 9 + 19 &= 1111111111111111111 \\1234567901234567899 \times 9 + 20 &= 11111111111111111111 \\12345679012345679010 \times 9 + 21 &= 111111111111111111111\end{aligned}$$

diapo 3

$$\begin{aligned} 9 \times 9 + 7 &= 88 \\ 98 \times 9 + 6 &= 888 \\ 987 \times 9 + 5 &= 8888 \\ 9876 \times 9 + 4 &= 88888 \\ 98765 \times 9 + 3 &= 888888 \\ 987654 \times 9 + 2 &= 8888888 \\ 9876543 \times 9 + 1 &= 88888888 \\ 98765432 \times 9 + 0 &= 888888888 \\ 987654321 \times 9 - 1 &= 8888888888 \\ 9876543210 \times 9 - 2 &= 88888888888 \\ 98765432099 \times 9 - 3 &= 888888888888 \\ 987654320988 \times 9 - 4 &= 8888888888888 \\ 9876543209877 \times 9 - 5 &= 88888888888888 \\ 98765432098766 \times 9 - 6 &= 888888888888888 \\ 987654320987655 \times 9 - 7 &= 8888888888888888 \\ 9876543209876544 \times 9 - 8 &= 88888888888888888 \\ 98765432098765433 \times 9 - 9 &= 888888888888888888 \\ 987654320987654322 \times 9 - 10 &= 8888888888888888888 \\ 9876543209876543211 \times 9 - 11 &= 88888888888888888888 \\ 98765432098765432100 \times 9 - 12 &= 888888888888888888888 \end{aligned}$$

diapo 4

$$\begin{aligned} 1 \times 1 &= 1 \\ 11 \times 11 &= 121 \\ 111 \times 111 &= 12321 \\ 1111 \times 1111 &= 1234321 \\ 11111 \times 11111 &= 123454321 \\ 111111 \times 111111 &= 12345654321 \\ 1111111 \times 1111111 &= 1234567654321 \\ 11111111 \times 11111111 &= 123456787654321 \\ 111111111 \times 111111111 &= 12345678987654321 \\ 1111111111 \times 1111111111 &= 1234567900987654321 \\ 11111111111 \times 11111111111 &= 123456790120987654321 \\ 111111111111 \times 111111111111 &= 12345679012320987654321 \\ 1111111111111 \times 1111111111111 &= 1234567901234320987654321 \\ 11111111111111 \times 11111111111111 &= 123456790123454320987654321 \end{aligned}$$