

Fun way to square numbers ending in 5

(helps with Long Multiplication)

*** an easy one**

$$\begin{array}{r} 5 \\ * 5 \\ \hline 25 \end{array} \quad 5^2 = 25$$

$\textcircled{3} * \textcircled{25}$ — we know that $5^2 = 25$

$$\begin{array}{r} \textcircled{6} \\ * 25 \\ \hline \end{array}$$

$\textcircled{6} \rightarrow \underline{\underline{625}} \leftarrow$

* multiply the numbers to the left of the 5 (in this case, 2) by the next consecutive whole number (in this case 3).

* put that product (in this case 6) to the left of the 25 and you have your answer.

Let's try some more

$$\begin{array}{r} 41 \\ * 40 \\ \hline 1,640 \end{array} \rightarrow$$

$$\begin{array}{r} 40\overline{)5} \\ * 40\overline{)5} \\ \hline 164,025 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 32 \\ * 33 \\ \hline 96 \\ + 96 \\ \hline 1056 \end{array}$$

$$\begin{array}{r} 32\overline{)5} \\ * 32\overline{)5} \\ \hline 105,625 \\ \hline \hline \end{array}$$

Practice

(compare to how fast it would take you using long multiplication)

$$\begin{array}{r} 105 \\ * 105 \\ \hline \end{array}$$

Practice

$$\begin{array}{r} 11 \\ *10 \\ \hline 110 \end{array}$$

(key)

$$\begin{array}{r} 105 \\ *105 \\ \hline 11,025 \end{array}$$

Practice

$$\begin{array}{r} 365 \\ * 365 \\ \hline \end{array}$$

Practice

$$\begin{array}{r} \textcircled{2} \textcircled{4} \\ 37 \\ * 36 \\ \hline 222 \\ 111 \\ \hline 1332 \end{array}$$

(key)

$$\begin{array}{r} 365 \\ * 365 \\ \hline 133225 \end{array}$$

the number of days
in 365 years