

Integer Multiplication and Division - ANSWERS

Multiplication

1.

$$\begin{array}{r}
 145 \\
 \times 23 \\
 \hline
 4^1 3^1 5 \\
 29^1 00 \\
 \hline
 3335 \\
 \hline
 1
 \end{array}$$

2.

$$\begin{array}{r}
 344 \\
 \times 169 \\
 \hline
 30^3 9^3 6 \\
 20^2 6^2 40 \\
 34400 \\
 \hline
 58136 \\
 \hline
 1 \quad 1
 \end{array}$$

3.

$$\begin{array}{r}
 1567 \\
 \times 305 \\
 \hline
 4^1 7^2 0^2 100 \\
 7^2 8^3 3^3 5 \\
 \hline
 477935 \\
 \hline
 1 \quad 1
 \end{array}$$

4.

$$\begin{array}{r}
 40250 \\
 \times 380 \\
 \hline
 1207^1 5000 \\
 15295000 \\
 \hline
 15295000 \\
 \hline
 1
 \end{array}$$

Note: This could have been done as 4025 x 38 and then shifted two places left by adding another two zeroes.

Division

1.

$$\begin{array}{r}
 433 \\
 8 \overline{) 3353024} \\
 \underline{24} \\
 95 \\
 \underline{72} \\
 230 \\
 \underline{160} \\
 700 \\
 \underline{560} \\
 1400 \\
 \underline{1120} \\
 2800 \\
 \underline{2240} \\
 5600 \\
 \underline{5600} \\
 0000
 \end{array}$$

2.

$$\begin{array}{r}
 558 \\
 12 \overline{) 6696} \\
 \underline{60} \\
 69 \\
 \underline{60} \\
 96 \\
 \underline{96} \\
 0000
 \end{array}$$

3.

$$\begin{array}{r}
 473 \\
 25 \overline{) 11825} \\
 \underline{100} \\
 18^7 12 \\
 \underline{175} \\
 75 \\
 \underline{75} \\
 0000
 \end{array}$$

4.

$$\begin{array}{r}
 234 \\
 502 \overline{) 119476} \\
 \underline{1004} \\
 1907 \\
 \underline{1506} \\
 4016 \\
 \underline{4016} \\
 0000
 \end{array}$$