

OneInMath

Mul 3d-4d - nd x nd Instructions (Pages 1 to 3)

Tutor: _____

Student: _____

Date: ____/____/2024

What To Do Next

When student completes this packet:

- Check packet for accuracy.
- Ask oral questions and determine next assignment.

Assign packet (check one): ____ Classwork ____ Homework

- Finish this packet.
- Repeat this packet: [Mul 3d-4d - nd x nd Instructions](#)
- Assign next packet: [Mul 3d-4d - 3d x nd](#)
- Assign another packet: _____

Instructions For This Packet

No instructions. Use common sense :)

Video Links

No video recommendations.

Tutor Notes

Multiplication 4d - Solving 4d x 3dSolve: 4782×365

$$\begin{array}{r}
 4782 \\
 \times 365 \\
 \hline
 23910 \leftarrow 4782 \times 5 \text{ (from unit's place)} \\
 28692 \leftarrow 4782 \times 6 \text{ (from ten's place)} \\
 + 14346 \leftarrow 4782 \times 3 \text{ (from hundred's place)} \\
 \hline
 1745430 \leftarrow \begin{array}{l} \text{Add three numbers} \\ 23910 + 286920 + 1434600 = \\ 1745430 \end{array}
 \end{array}$$

Note:

Student should already know how to multiply with carry. If not, please see instructions for 2d x 2d instructions in previous module.

Multiplication 4d - Solving 4d x 3d with zeros at the endSolve: 4780×360

$$\begin{array}{r}
 4780 \\
 \times 360 \\
 \hline
 286800 \leftarrow \text{Put two zeros first} \\
 + 143400 \leftarrow 478 \times 6 \text{ (from hundred's place)} \\
 \hline
 1720800 \leftarrow 478 \times 3 \text{ (from thousand's place)} \\
 \hline
 1720800 \leftarrow \text{Add two numbers} \\
 \hline
 \end{array}$$

$286800 + 1434000 = 1720800$

Note:

You can only use this shortcut for zeros at the end of the number.

Multiplication 4d - Solving 4d x 3d with zeros in betweenSolve: 4780×360

$$\begin{array}{r}
 4702 \\
 \times 304 \\
 \hline
 18808 \quad \leftarrow 4702 \times 4 \text{ (from unit's place)} \\
 0000 \quad \leftarrow 4702 \times 0 \text{ (from ten's place)} \\
 + 14106 \quad \leftarrow 4702 \times 3 \text{ (from hundred's place)} \\
 \hline
 1429408 \quad \leftarrow \begin{array}{l} \text{Add two numbers} \\ 18808 + 0 + 14106 = 1429408 \end{array} \\
 \hline
 \end{array}$$

Alternate: You can eliminate '0000' as follows:

$$\begin{array}{r}
 4702 \\
 \times 304 \\
 \hline
 18808 \quad \leftarrow 4702 \times 4 \text{ (from unit's place)} \\
 + 141060 \quad \leftarrow \begin{array}{l} 4702 \times 0 \text{ (0 in ten's place)} \\ 4702 \times 3 \text{ (from hundred's place)} \end{array} \\
 \hline
 1429408 \quad \leftarrow \begin{array}{l} \text{Add two numbers} \\ 18808 + 141060 = 1429408 \end{array} \\
 \hline
 \end{array}$$