

Grade 3: Base 10 Concepts

DMTI VARIED PRACTICE

DMTI Varied Practice Worksheets

This PowerPoint displays the worksheets that have varied situations (context, visual, equations, and other mathematical models) for children to work on. By completing these worksheets, children increase their foundational skills in the topic, which will help them with these standards and future mathematical topics.

1. If using a journal, have children present the worksheet and complete all the problems.
2. Or print the 'Varied Practice Worksheet Slide' for them to work on. Then, you can return to the PowerPoint to look at the keys to check their work.

Grade 3: Base 10 Concepts

Materials Needed

Printed copies of the Base 10 Concepts worksheet

Instructions

The 10 Rule states, *“When you multiply a number by 10, each part of the number will increase by one place value.”*

You will use the 10 Rule to select the correct product and complete the sentence frame.

Note that the variable n stands for the unknown number.

Example:

| Equation | Product (What is the value of n ?) | Sentence Frame |
|-------------------|--------------------------------------|--|
| $3 \times 10 = n$ | a) 13 b) 30 c) 310 | <i>3 x 10 = 30 because the digit 3 in the ones place increases by one place value to 3 units of ten.</i> |

| Equation | Product (What is the value of n ?) | Sentence Frame |
|--------------------|--------------------------------------|--|
| $5 \times 10 = n$ | a) 15 b) 50 c) 510 | $5 \times 10 = \underline{\quad}$ because the digit 5 in the ones place _____ by one place value to _____ units of _____. |
| $n = 8 \times 10$ | a) 80 b) 810 c) 18 | $\underline{\quad} = 8 \times 10$ because the digit 8 in the ones place _____ by one place value to _____ units of _____. |
| $12 \times 10 = n$ | a) 112 b) 121 c) 120 | $12 \times 10 = \underline{\quad}$ because the digit 1 in the _____ place increases by _____ place value to _____ units of one hundred and the 2 in the _____ place _____ to 2 units of _____. |
| $n = 10 \times 17$ | a) 117 b) 170 c) 171 | $\underline{\quad} = 10 \times 17$ because the digit _____ in the tens place increases by _____ place value to 1 unit of _____ and the 7 in the ones place increases to _____ units of _____. |

| Equation | Product (What is the value of n ?) | Sentence Frame |
|--------------------|--------------------------------------|--|
| $5 \times 10 = n$ | a) 15 b) 50 c) 510 | $5 \times 10 = 50$ because the digit 5 in the ones place increases by one place value to 5 units of ten. |
| $n = 8 \times 10$ | a) 80 b) 810 c) 18 | $80 = 8 \times 10$ because the digit 8 in the ones place increases by one place value to 8 units of ten. |
| $12 \times 10 = n$ | a) 112 b) 121 c) 120 | $12 \times 10 = 120$ because the digit 1 in the tens place increases by one place value to 1 units of one hundred and the 2 in the ones place increases to 2 units of ten. |
| $n = 10 \times 17$ | a) 117 b) 170 c) 171 | $170 = 10 \times 17$ because the digit 1 in the tens place increases by one place value to 1 unit of one hundred and the 7 in the ones place increases to 7 units of ten. |