

DMT INSTITUTE

Developing Mathematical Thinking Institute (DMTI)



Professional
Development



Curricular
Resources



Assessment

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Grade 4: Multiplication Fluency

DMTI VARIED PRACTICE

DMTI Varied Practice Worksheets

This PowerPoint or PDF 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 Slides' for them to work on. Then, you can return to the PowerPoint or PDF to look at the keys to check their work.

Grade 4: Multiplication Fluency – Part 1

Materials Needed

Printed copies of the Multiplication Fluency- Part 1 worksheet

Instructions

You will be given a basic multiplication fact and a model that represents the fact.

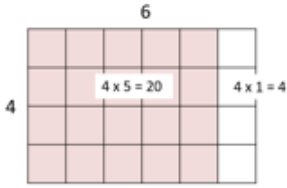
Then, use the **given fact** to find the more difficult **challenge fact**. The given facts are either a $\times 5$ fact, or a fact that can be doubled to solve the challenge fact.

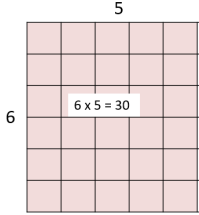
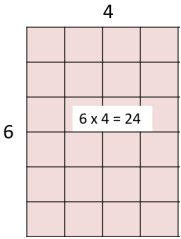
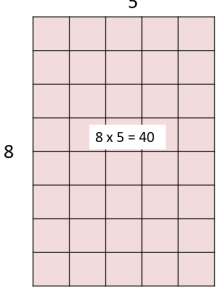
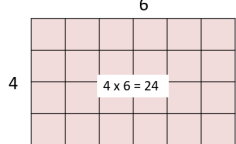
Change the model to show how the given fact and the challenge fact are related, visually.

Finally, complete the **sentence frame**.

Use these strategies to solve the facts on the **Practice Cards: Using 5 or Doubling**

Example:

Given Fact	Model	Challenge Fact	Sentence Frame
$4 \times 5 = 20$		$4 \times 6 = \underline{24}$	<i>I know $4 \times 5 = 20$ and $4 \times 1 = 4$. Since $20 + 4 = 24$, $4 \times 6 = 24$.</i>

Given Fact	Model	Challenge Fact	Sentence Frame
$6 \times 5 = 30$		$6 \times 8 = \underline{\quad}$	<p><i>I know $6 \times 5 = 30$ and $6 \times \underline{\quad} = \underline{\quad}$.</i> <i>Since $\underline{\quad} + \underline{\quad} = 48$, $6 \times 8 = \underline{\quad}$.</i></p>
$6 \times 4 = 24$		$6 \times 8 = \underline{\quad}$	<p><i>I know $6 \times 4 = 24$ and 6×8 is 6×4 doubled.</i> <i>Since $\underline{\quad} + 24 = \underline{\quad}$, $6 \times 8 = \underline{\quad}$.</i></p>
$8 \times 5 = 40$		$8 \times 7 = \underline{\quad}$	<p><i>I know $8 \times 5 = 40$ and $\underline{\quad} \times 2 = \underline{\quad}$.</i> <i>Since $40 + \underline{\quad} = \underline{\quad}$, $8 \times 7 = \underline{\quad}$.</i></p>
$4 \times 6 = 24$		$8 \times 6 = \underline{\quad}$	<p><i>I know $4 \times 6 = 24$ and 8×6 is 4×6 doubled.</i> <i>Since $24 + \underline{\quad} = \underline{\quad}$, $8 \times 6 = \underline{\quad}$.</i></p>

Practice Cards: Using 5 or Doubling

6×9

7×6

4×8

4×9

9×8

9×7

6×6

3×8

9×6

6×7

8×4

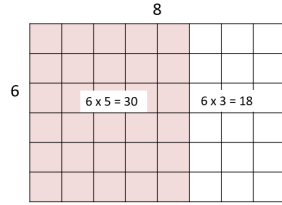
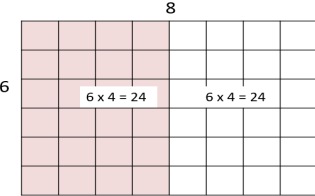
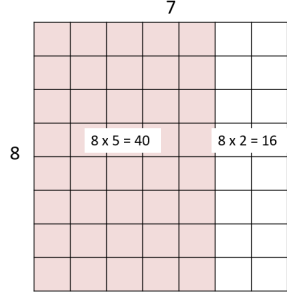
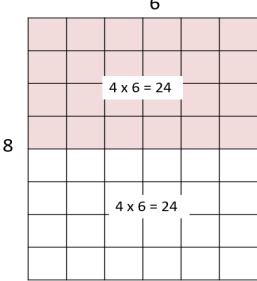
9×3



“The Developing Mathematical Thinking Institute (DMTI) is dedicated to enhancing students’ learning of mathematics by supporting educators in the implementation of research-based instructional strategies through high-quality professional development, curricular resources and assessments.”

For more information contact
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Given Fact	Model	Challenge Fact	Sentence Frame
$6 \times 5 = 30$		$6 \times 8 = 48$	<p><i>I know $6 \times 5 = 30$ and $6 \times 3 = 18$. Since $30 + 18 = 48$, $6 \times 8 = 48$.</i></p>
$6 \times 4 = 24$		$6 \times 8 = 48$	<p><i>I know $6 \times 4 = 24$ and 6×8 is 6×4 doubled. Since $24 + 24 = 48$, $6 \times 8 = 48$.</i></p>
$8 \times 5 = 40$		$8 \times 7 = 56$	<p><i>I know $8 \times 5 = 40$ and $8 \times 2 = 16$. Since $40 + 16 = 56$, $8 \times 7 = 56$.</i></p>
$4 \times 6 = 24$		$8 \times 6 = 48$	<p><i>I know $4 \times 6 = 24$ and 8×6 is 4×6 doubled. Since $24 + 24 = 48$, $8 \times 6 = 48$.</i></p>

$$(5 \times 9) + (1 \times 9) = 54$$

$$6 \times 9$$

$$(3 \times 9) + (3 \times 9) = 54$$

$$(7 \times 5) + (7 \times 1) = 42$$

$$7 \times 6$$

$$(7 \times 3) + (7 \times 3) = 42$$

$$(4 \times 5) + (4 \times 3) = 32$$

$$4 \times 8$$

$$(4 \times 4) + (4 \times 4) = 32$$

$$(4 \times 5) + (4 \times 4) = 36$$

$$4 \times 9$$

$$(2 \times 9) + (2 \times 9) = 36$$

$$(9 \times 5) + (9 \times 3) = 72$$

$$9 \times 8$$

$$(9 \times 4) + (9 \times 4) = 72$$

$$(9 \times 5) + (9 \times 2) = 64$$

$$9 \times 7$$

$$(6 \times 5) + (6 \times 1) = 36$$

$$6 \times 6$$

$$(6 \times 3) + (6 \times 3) = 36$$

$$3 \times 8$$

$$(3 \times 4) + (3 \times 4) = 24$$

$$(9 \times 5) + (9 \times 1) = 54$$

$$9 \times 6$$

$$(9 \times 3) + (9 \times 3) = 54$$

$$(6 \times 5) + (6 \times 2) = 42$$

$$6 \times 7$$

$$(3 \times 7) + (3 \times 7) = 42$$

$$(5 \times 4) + (3 \times 4) = 32$$

$$8 \times 4$$

$$(8 \times 2) + (8 \times 2) = 32$$

$$(5 \times 3) + (4 \times 3) = 27$$

$$9 \times 3$$