

Mental Math Strategy Worksheets for Eighth Grade

To: Teachers wishing to use these mental math worksheets

From: Jim Olsen

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RE: Overview, comments, suggestions

The **purpose** of these worksheets is to provide students with:

- ❖ Instruction in mental math strategies.
- ❖ Practice using mental math strategies.
- ❖ Practice *selecting* and using mental math strategies from strategies previously learned.
- ❖ Practice in the skills, procedures, and problem types which are important for the course.
- ❖ Examples of how mental math is useful in everyday life.
- ❖ Abilities to use mental math strategies which reduce the amount of time needed for homework, help math make sense, increase understanding of mathematics, and increase confidence in mathematics.

Use – I use these worksheets in the first 5-6 minutes of class, one day per week.

15 Worksheets for first semester – Numbered #9.1 - #9.15 – These teach 15 mental math strategies (including a few estimation strategies). I recommend using one per week (perhaps on a particular day of the week). However, these worksheets can be used in a variety of ways. Each worksheet provides practice on the new strategy of the day and practice selecting and using previous strategies.

Pre-test, Practice Test, and Post-test are provided. I recommend giving the students 8 minutes to do the each test (more time as you see fit). I recommend giving the Pre-test at the beginning of the semester before any strategies are taught. I recommend providing students with the practice test near the end of the semester and administering the Post-test at end of the semester. I think you will see marked improvement.

The most important question. – If you use these worksheets, your class will be gradually building up mental math strategies. During the regular course of the class, when you get to a calculation (for example, solve $2x = 84$), take 5 seconds to ask the question, ***“Do we have a mental math strategy for that?”*** You will find that often times you will! When you do not, then use a calculator (or, rarely paper and pencil)! Making an informed decision as to which tool to use is huge.

15 more Worksheets – my plan is to provide 15 more mental math worksheets for second semester.

Feedback – Please provide me feedback on how well these worksheets worked for you and your students. If there are any errors, please let me know. JR-Olsen@wiu.edu

Files:

- This letter.
- First 15 Strategies list.
- Three tests. Pre- Practice- Post- (3 files)
- 15 worksheets (half sheets) (15 files)