

TO CALCULATE BY SELECTING OPERATIONS APPROPRIATE TO SOLVING PROBLEMS*

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1 MATHEMATICS

2 Number Concept

3 EDUCATOR SECTION

4 Memorandum

1.1 $3\,272 + 128 = 3\,400$

$1\,154 + 136 = 1\,290$

$1\,103 + 97 = 1\,200$

SUM = 5 890

1.2 $138 + 622 = 760$

$259 + 11\,011 = 11\,270$

$235 + 25 = 4\,260$

SUM: = 16 290

2.1 Wrong: $640 + 360 + 5 + 2 - 2 = 1\,005$

2.2 Wrong: $2\,500 + 360 = 2\,880$

Brain Teaser

1. $41\,186 + 23\,880 + 12 = 65\,078$

2. $758\,817 + 100 + 118\,200 - 4 = 875\,113$

Various other possibilities

5 LEANER SECTION

5.1 Content

5.2 ACTIVITY: To calculate by selecting operations appropriate to solving problems [LO 1.8.2]

5.2.1 DO YOU STILL REMEMBER?

Addition is easier when we GROUP numbers.

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Look carefully at the following example:

$$37 + 28 + 12 + 16 + 13 + 44$$

If we group the numbers they look like this: $37 + 13 = 50$

$$28 + 12 = 40$$

$$44 + 16 = 60$$

$$\text{SUM} = 150$$

Understand? We group the numbers like this because we want to “complete” the tens, so that it is easier to add.

1. Group the following numbers so that you can add them more easily:

1.1 3 272 ; 1 154 ; 97 ; 128 ; 136 ; 1 103

	+		=	
	+		=	
	+		=	

SUM = _____

1.2 138 ; 259 ; 4 235 ; 25 ; 11 011 ; 622

	+		=	
	+		=	
	+		=	

SUM = _____

2. Work with a friend and determine whether the answers of the following calculations are correct. If they are not, indicate the error.

2.1 $638 + 367 = 640 + 360 - 5 = 995$

2.2 $2\,496 + 364 = 2\,600 + 360 = 2\,960$

5.2.2 BRAIN TEASER!

You are supposed to complete the following with a calculator, but the 9 on your calculator doesn't work! How will you solve the problem? Write down everything you key in and calculate the answer:

1. $41\,186 + 23\,892$

2. $756\,917 + 118\,196$

5.2.3 TIME FOR SELF-ASSESSMENT

How do you feel about the work so far? Please give us some indication of how you feel about the work that we have completed by now. Make a tick in the appropriate column:

	Not at all	Fairly well	Well	Really well
I know what “sum of” means.	-----	-----	-----	-----
<i>continued on next page</i>				

I can explain the word “inverse”.	-----	-----	-----	-----
I can group numbers to add them more easily. (LO1.8)	-----	-----	-----	-----

Table 1

6 Assessment

Learning Outcome 1: The learner will be able to recognise, describe and represent numbers and their relationships, and to count, estimate, calculate and check with competence and confidence in solving problems.

Assessment Standard 1.8: We know this when the learner estimates and calculates by selecting and using operations appropriate to solving problems that involve:

1.8.2: addition and subtraction of whole numbers.