

# NCTM Content Standards Assessment Rubric

## Number and Operations – Drill Sheets

Student's Name: \_\_\_\_\_ Assignment: \_\_\_\_\_ Level: \_\_\_\_\_

	Level 1	Level 2	Level 3	Level 4
<b>Understanding Numbers, Ways of Representing Numbers, Relationships Among Number Systems</b>	<ul style="list-style-type: none"> <li>Demonstrates a limited understanding of numbers, ways of representing numbers and relationships among number systems</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a basic understanding of numbers, ways of representing numbers and relationships among number systems</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a good understanding of numbers, ways of representing numbers and relationships among number systems</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a thorough understanding of numbers, ways of representing numbers and relationships among number systems</li> </ul>
<b>Understanding Meanings of Operations and How They Relate to One Another</b>	<ul style="list-style-type: none"> <li>Demonstrates a limited understanding of the meanings of operations and how they relate to one another</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a basic understanding of the meanings of operations and how they relate to one another</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a good understanding of the meanings of operations and how they relate to one another</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates a thorough understanding of the meanings of operations and how they relate to one another</li> </ul>
<b>Computing and Making Estimates</b>	<ul style="list-style-type: none"> <li>Demonstrates limited ability in computing and making estimates</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates some ability in computing and making estimates</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates satisfactory ability in computing and making estimates</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates strong ability in computing and making estimates</li> </ul>

**STRENGTHS:**

**WEAKNESSES:**

**NEXT STEPS:**

SAMPLE

NAME: \_\_\_\_\_



5a) Solve the following.

i)  $12 + 25 - (18 - 13) \times 2 =$

ii)  $3.4 \times 5.6 =$

iii)  $1230 \div 30 =$

iv) 
$$\begin{array}{r} 4810 \\ \times 79 \\ \hline \end{array}$$

v) 
$$\begin{array}{r} 7745 \\ \times 80 \\ \hline \end{array}$$

vi) 
$$\begin{array}{r} 2649 \\ \times 93 \\ \hline \end{array}$$

vii) 
$$\begin{array}{r} 5012 \\ \times 84 \\ \hline \end{array}$$

b) Which number is closest to 1 000 000?

i. 987 231

ii. 1 363 497

iii. 1 036 511

iv. 999 999

c) For the following picture, write as many multiplication and division sentences that you can. Ex:  $8 \times 4 = 32$



Answer: \_\_\_\_\_

d) Show each of the following fractions as a percent (to the closest whole number).

i)  $3/25 =$

ii)  $17/20 =$

iii)  $3/5 =$

iv)  $1/3 =$

e) The following numbers are written in expanded form. Rewrite them in standard form. Ex:  $2 \times 10^3 + 5 \times 10^2 + 6 \times 10 + 1 = 2000 + 500 + 60 + 1 = 2561$

i)  $7 \times 10^3 + 4 \times 10^2 + 9 \times 10 + 3 =$

ii)  $4 \times 10^3 + 1 \times 10^2 + 9 \times 10 + 6 =$

f) Write the following fractions in order from least to greatest.

$3/2, 5/4, 6/5$  \_\_\_\_\_

NAME: \_\_\_\_\_



# Review A

**a) List the following numbers in order from greatest to least:**

17.34, 21.009, 1.734, 2.1009, 0.1734 \_\_\_\_\_

**b) Write the following number in words.**

86 356 \_\_\_\_\_

**c) Determine:**

i) 40% of 24 \_\_\_\_\_

ii) 25% of 120 \_\_\_\_\_

**d) Write the place value of the underlined digit.**

i) 5902.5 = \_\_\_\_\_ ii) 2548.23 = \_\_\_\_\_

**e) Write the following number in expanded form.**

134 691 = \_\_\_\_\_

**f) Multiply the following.**

i) 
$$\begin{array}{r} 3518 \\ \times 78 \\ \hline \end{array}$$

ii) 
$$\begin{array}{r} 804.3 \\ \times 34 \\ \hline \end{array}$$

iii) 
$$\begin{array}{r} \$32.78 \\ \times 51 \\ \hline \end{array}$$

iv) 
$$\begin{array}{r} 5397 \\ \times 0.02 \\ \hline \end{array}$$

**g) In Rene's swim team, 12 of the 19 members are girls. What is the ratio of girls to boys on her swim team? \_\_\_\_\_**

**h) Find the missing number in the fraction equivalents.**

i)  $\frac{4}{5} = \frac{\quad}{25}$

ii)  $\frac{1}{2} = \frac{\quad}{24}$

iii)  $\frac{12}{48} = \frac{1}{\quad}$

# Fractions, Percent



a) Record the following number in the accompanying place value chart.

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

b) Shade the model to show the correct fraction below.

Fraction =

c) Find the value of each percent.

i) \_\_\_\_\_ % of \_\_\_\_\_ = \_\_\_\_\_      ii) \_\_\_\_\_ % of \_\_\_\_\_ = \_\_\_\_\_

d) Place either a  $>$  or  $<$  symbol between the following pairs of fractions or decimals to indicate which is greater.

i) \_\_\_\_\_  \_\_\_\_\_      ii) \_\_\_\_\_  \_\_\_\_\_      iii) \_\_\_\_\_  \_\_\_\_\_

e) Convert the following improper fractions to mixed numbers.

i) \_\_\_\_\_ = \_\_\_\_\_      ii) \_\_\_\_\_ = \_\_\_\_\_      iii) \_\_\_\_\_ = \_\_\_\_\_

f) What is the correct way to write the number \_\_\_\_\_ in words?