

# 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>

**WEAKNESSES:**

**STRENGTHS:**

**NEXT STEPS:**

SAMPLE

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



**15a) Record the following numbers in the accompanying place value charts.**



i) 56.024

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

ii) 90023.846

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

**b) What fractions are shaded?**



**c) Solve the following.**

- i)  $701 \times 10^3 =$       ii)  $0.034 \times 10^1 =$       iii)  $12.2 \times 0.001 =$   
 iv)  $8(0.03 \times 1.2) - (6 \times 0.02) =$       v)  $(0.04 \times 3.4) + (17 \times 0.02) =$   
 vi)  $2/3 \div 7/9 =$       vii)  $5/3 \div 9/11 =$

**d) Josh has played baseball for the past four summers. His home run totals for these four years were; 12, 17, 23 and 19. What is the mean number of home runs (to the nearest whole number)? \_\_\_\_\_**

**e) Four hundred students attend General Brock Public School. Twenty percent had perfect attendance. How many students had perfect attendance? \_\_\_\_\_**

**f) Write the mixed number for each of the following.      Ex:  $10/3 = 3 \frac{1}{3}$**

- i)  $13/6 =$       ii)  $19/2 =$       iii)  $43/12 =$

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



# Review B

a) What is the number 10 000 before the following:

i)	80 252	
ii)	952 873.6	

b) Multiply the following.

i)  $5902 \times 245$

ii)  $\$53.90 \times 376$

iii)  $765.1 \times 23.5$

iv)  $53.01 \times 3.7$

c) Calculate the mean, median and mode for the following list of numbers.

390, 440, 280, 782, 440, 336, 316

Mean	
Median	
Mode	

d) Record the following number in the accompanying place value chart. 29 064.013

Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

e) Solve the following.

i)  $1/3 \times 4/5 =$

ii)  $7/8 \div 1/4 =$

iii)  $7 \times 1/5 \times 2/7 =$

iv)  $2/3 \div 1/8 \times 1/2 =$

v)  $6.2 \times 10^2 =$

vi)  $0.002 \times 10^3 =$

# 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?