

# Process Standards Rubric

## Number and Operations – Drill Sheets

Drills	Expectations			
	GOAL 1: Problem Solving	GOAL 2: Reasoning & Proof	GOAL 3: Communication	GOAL 4: Connections
Warm-up 1	✓	✓	✓	✓
Timed Drill 1	✓	✓	✓	✓
Timed Drill 2	✓	✓	✓	✓
Warm-up 2	✓	✓	✓	✓
Timed Drill 3	✓	✓	✓	✓
Timed Drill 4	✓	✓	✓	✓
Warm-up 3	✓	✓	✓	✓
Timed Drill 5	✓	✓	✓	✓
Timed Drill 6	✓	✓	✓	✓
Warm-up 4	✓	✓	✓	✓
Timed Drill 7	✓	✓	✓	✓
Timed Drill 8	✓	✓	✓	✓
Warm-up 5	✓	✓	✓	✓
Timed Drill 9	✓	✓	✓	✓
Warm-up 6	✓	✓	✓	✓
Timed Drill 10	✓	✓	✓	✓
Timed Drill 11	✓	✓	✓	✓
Review A	✓	✓	✓	✓
Review B	✓	✓	✓	✓
Review C	✓	✓	✓	✓

### Expectations

Instructional programs from pre-kindergarten through grade 12 should enable all students to:

- build new mathematical knowledge through problem solving;
- solve problems that arise in mathematics and in other contexts;
- apply and adapt a variety of appropriate strategies to solve problems;
- monitor and reflect on the process of mathematical problem solving.
- recognize reasoning and proof as fundamental aspects of mathematics;
- make and investigate mathematical conjectures;
- develop and evaluate mathematical arguments and proofs;
- select and use various types of reasoning and methods of proof.
- organize and consolidate their mathematical thinking through communication;
- communicate their mathematical thinking coherently and clearly to peers, teachers, and others;
- analyze and evaluate the mathematical thinking and strategies of others;
- use the language of mathematics to express mathematical ideas precisely.
- recognize and use connections among mathematical ideas;
- understand how mathematical ideas interconnect and build on one another to produce a coherent whole;
- recognize and apply mathematics in contexts outside of mathematics.
- create and use representations to organize, record, and communicate mathematical ideas;
- select, apply, and translate among mathematical representations to solve problems;
- use representations to model and interpret physical, social, and mathematical phenomena.



**14a) Write the place value of the underlined digit.**

i) 341893.234 = \_\_\_\_\_

ii) 639 745.116 = \_\_\_\_\_

**b) Use >, <, or = to compare the pairs of numbers below.**

i) 7762.661  7762.0661

ii) 996.080  996.08

**c) Solve the following.**

i)  $567.341 \times 100 =$

ii)  $43 \times 10^3 =$

iii)  $0.00023 \times 0.001 =$

iv)  $10^2 \times 10^1 =$

v)  $144 \div 12 =$

vi)  $72 \div 8 =$

vii)  $99 \div 11 =$

viii)  $12 \times 1 =$

**d) Write the following numbers using words.** Ex: 32.6 = thirty two decimal six

i) 325.23 = \_\_\_\_\_

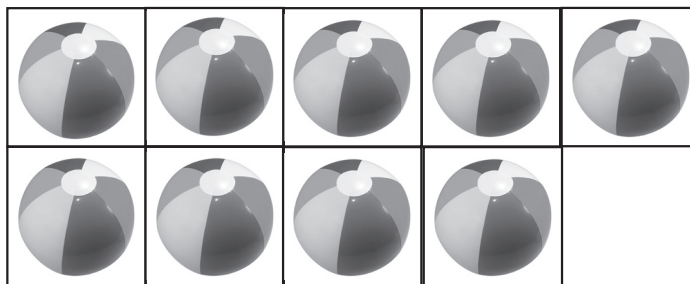
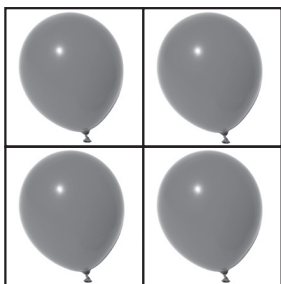
ii) 277 359 = \_\_\_\_\_

**e) Write the expanded form for each of the following numbers.** Ex: 10.12 = 10 + 0.1 + 0.02

i) 67 892 = \_\_\_\_\_

ii) 78 401.96 = \_\_\_\_\_

**f) For the following picture, write as many multiplication and division sentences that you can.**



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**g) Find the value of each percent:**

i) 60% of 90

ii) 32% of 200



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

SAMPLE

# Place Value, Ordering



a) Solve the following.

i)  ×  =

ii)  +  =

b) Write greater than (>), less than (<), or equal to (=) in the box between the two numbers.

i) \_\_\_\_\_  \_\_\_\_\_

ii) \_\_\_\_\_  \_\_\_\_\_

iii) \_\_\_\_\_  \_\_\_\_\_

c) Which number is modeled in the place-value chart below?

100 Thousands	10 Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

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

d) Round each number to the nearest thousand.

i)	<input type="text"/>	ii)	<input type="text"/>	iii)	<input type="text"/>
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e) Write the following group of numbers in order from least to greatest.

i)	<input type="text"/>
	<input type="text"/>