NCTM Content Standards Assessment Rubric

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Algebra – Drill Sheets

Student's Name: _____ Assignment: _____ Level: _____

|	Level 1	Level 2	Level 3	Level 4
Understanding the Algebraic Concepts: Sorting, Patterning, Graphing, Equations and Quantitative Change	• Demonstrates a limited understanding of Sorting, Patterning, Graphing, Equations and Quantitative Change	• Demonstrates a basic understanding of Sorting, Patterning, Graphing, Equations and Quantitative Change	• Demonstrates a good understanding of Sorting, Patterning, Graphing, Equations and Quantitative Change	• Demonstrates a thorough understanding of Sorting, Patterning, Graphing, Equations and Quantitative Change
Applying Appropriate Technique, Tools, and Formulas to Solve Algebraic Problems	• Demonstrates limited ability in using formulas to solve algebraic equations	• Demonstrates some ability in using formulas to solve algebraic equations	• Demonstrates satisfactory ability in using formulas to solve algebraic equations	• Demonstrates strong ability in using formulas to solve algebraic equations

SAMPLE

STRENGTHS:

WEAKNESSES:

NEXT STEPS:

15a) Solve the following problems:

i) Since 3 + 6 = 9, then 9 – 3 = ____

ii) Since 4 + 8 = 12, then 12 – 4 = ____

iii) Since 9 + 7 = 16, then 16 – 9 = ____

iv) Since 12 + 8 = 20, then 20 – 12 = ____
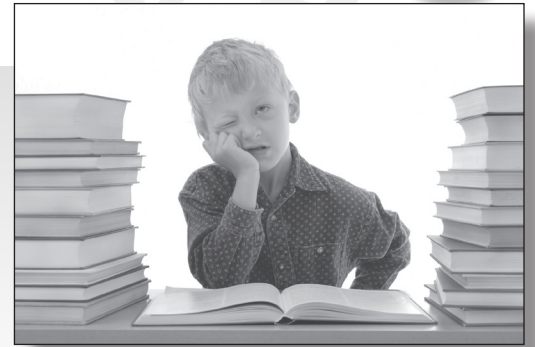
b) Which is another way to show 5 x 3?

i. 3 + 3 + 3   ii. 5 + 3 + 3   iii. 3 + 3 + 3 + 3 + 3   iv. 3 + 3

c) Look at the following pattern:

What coin comes next in this pattern?

i.   ii.   iii.

Reflection Jason has 16 books. What is one way to put his books into equal groups?

i. 3 groups of 5   ii. 4 groups of 4

iii. 4 groups of 6   iv. 2 groups of 4

Review A

a) **Fill in the charts below with the missing numbers.**

i)

4		6			9			

ii)

11				15					20	

b) **Choose > = or <:**

i) 3 ☐ 3   ii) 5 ☐ 6   iii) ☐

c) **Complete the pattern:**

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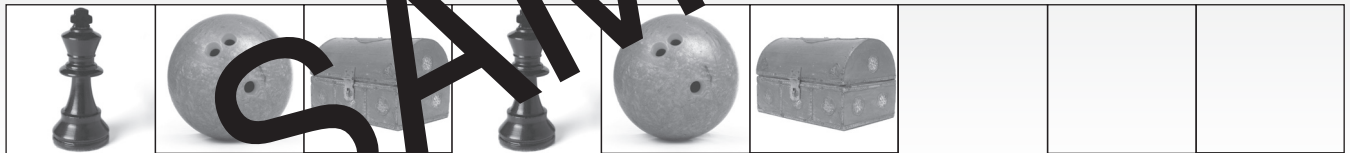
d) **Add:**

＋   = _____

e) **Place the following numbers in the correct order by size from smallest to largest.**

10   1   6   4   8

1st		2nd		3rd		4th		5th	

Even Numbers, Equations, Patterning

a) **Which of the following numbers are even?**

_____   _____   _____   _____

b) **Half of** ☐ **is** ☐

c) **How do you make the number _____?**

_____ + _____ = _____   _____ + _____ = _____

_____ + _____ = _____   _____ + _____ = _____

d) Complete the pattern.

SAMPLE
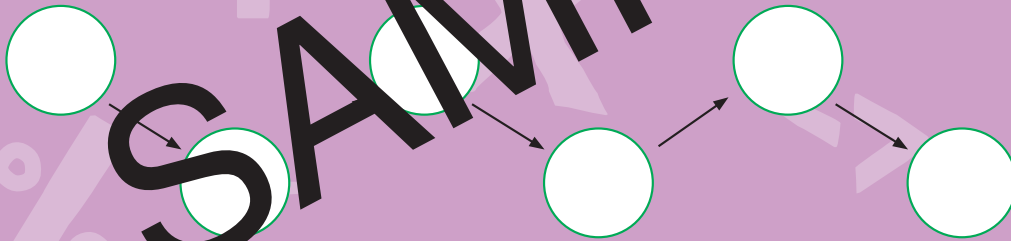
e) Since _____ + _____ = _____ ,   **then** _____ – _____ = _____

f) Since _____ + _____ = _____ ,   **then** _____ – _____ = _____

g) Solve each equation.

i) _____ + a = _____   a = _____   **ii)** _____ – b = _____   b = _____