



# Acadience™ Math

Acadience Math is a set of brief, standardized indicators of early numeracy, computation, and problem solving skills for grades K–6. Acadience Math consists of materials for universal screening three times a year and more frequent progress monitoring. The Early Numeracy measures are given individually to students in kindergarten and first grade. The Computation measures are group administered to students in grades 1–6. The Concepts and Applications measures are group administered in grades 2–6. Acadience Math is aligned with the Common Core Standards in Mathematics.

Research-based benchmark goals are available for all measures and grades. They define a level at which the odds are in the student’s favor of meeting later mathematics outcome goals.

Data entry for math is available through Acadience Data Management for the low cost of \$1 per student per school year. If you already enter Acadience Reading K-6 data, the cost of Acadience Math is already included, so you will only pay \$1 per student. For more information, visit:

<https://acadiencelearning.net/>

## Description of the Measures

**Early Numeracy** One minute measures given individually to students in kindergarten and first grade.

- **Beginning Quantity Discrimination** BQD assesses discrimination between two quantities. It is an indirect measure of subitizing, the ability to instantly judge the number associated with a group of items. BQD is administered from the beginning of kindergarten to the end of kindergarten.
- **Number Identification** NID assesses ability to orally name the numerals 1 through 99. It is administered from the beginning of kindergarten to the beginning of first grade.
- **Next Number Fluency** NNF assesses the ability to extend the counting sequence. The task is administered orally, with the assessor saying a number and the student saying the next higher

number. NNF is administered from the beginning of kindergarten to the beginning of first grade.

- **Advanced Quantity Discrimination** AQD assesses discrimination between two quantities. The student is asked to name the larger of two numbers. AQD is administered from the beginning of first grade to the end of first grade.
- **Missing Number Fluency** MNF assesses the ability to extend a counting sequence counting by 1s, 5s, and 10s. The student is provided with a sequence of four numbers with one number missing, and asked to orally provide the missing number. MNF is administered from the beginning of first grade to the end of first grade.

**Computation** Computation assesses the basic skills of math computation. It can be administered individually or to groups. Students work basic computation problems under standardized conditions and time limits which depend on grade level.

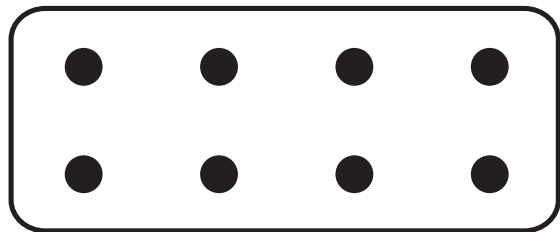
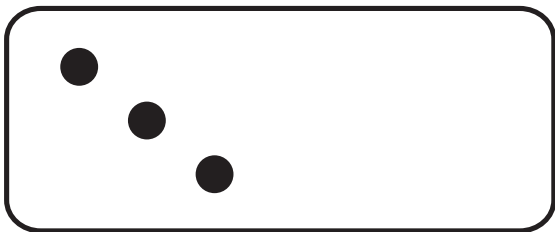
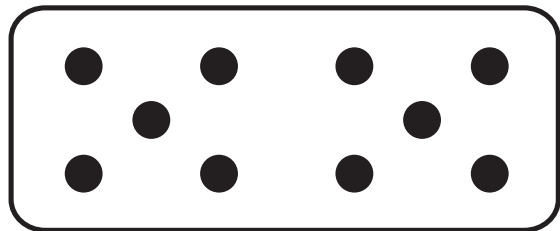
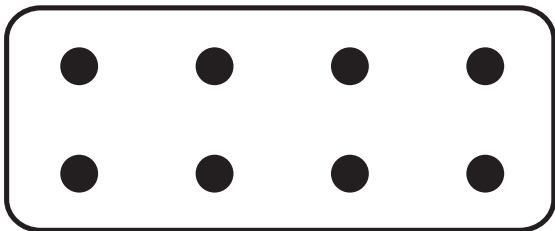
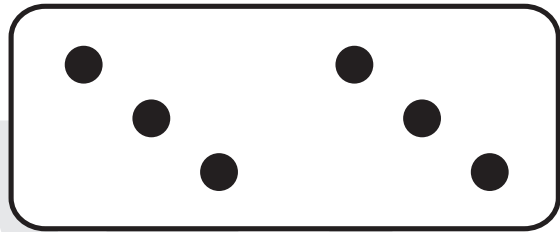
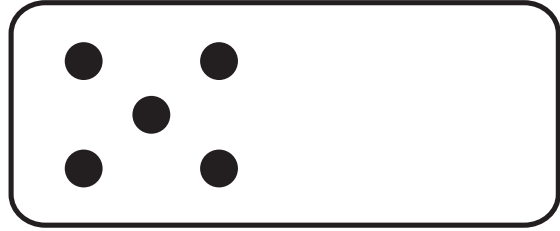
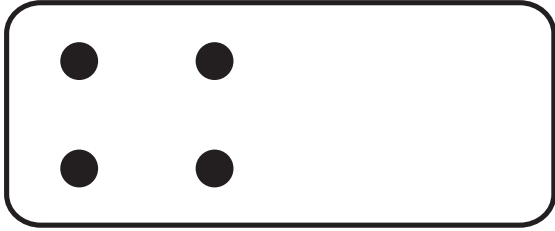
**Concepts and Applications** Concepts and Applications assesses the basic skills of understanding mathematical concepts and vocabulary, and applying that knowledge to solve mathematical problems. It can be administered individually or to groups. Students work problems under standardized conditions and time limits which are dependent on grade level.

## Sample Materials

Sample Acadience Math materials are attached. The samples include student materials for Beginning Quantity Discrimination, Advanced Quantity Discrimination, and Missing Number Fluency, sample Computation student worksheet pages from grades 1 and 4, and sample Concepts and Applications student worksheet pages from grades 2 and 6.

For more information about Acadience Math, contact [info@acadiencelearning.org](mailto:info@acadiencelearning.org).





23      3

37      69

54      93

11      37

38      34

97      54

14      39

71      46

88      79

42      33

DRAFT

11 \_ 13 14

20 30 \_ 50

40 45 \_ 55

52 53 \_ 55

18 \_ 20 21

15 20 \_ 30

15 16 \_ 18

9 19 \_ 39

60 \_ 70 75

33 \_ 35 36

DRAFT

Total: \_\_\_\_\_

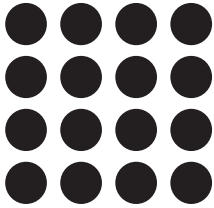
$\begin{array}{r} 6 \\ +0 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ +2 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ -4 \\ \hline \end{array}$	$\begin{array}{r} 15 \\ - 7 \\ \hline \end{array}$
$\begin{array}{r} 4 \\ -0 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 20 \\ - 9 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ -4 \\ \hline \end{array}$
$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 18 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 19 \\ - 8 \\ \hline \end{array}$	$\begin{array}{r} 20 \\ - 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +6 \\ \hline \end{array}$
$\begin{array}{r} 18 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 12 \\ - 6 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ -1 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ +2 \\ \hline \end{array}$
$\begin{array}{r} 6 \\ -5 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ +3 \\ \hline \end{array}$	$\begin{array}{r} 13 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ -3 \\ \hline \end{array}$	

Total: \_\_\_\_\_

$\begin{array}{r} 527 \\ +320 \\ \hline \end{array}$	$\begin{array}{r} 4778 \\ +2242 \\ \hline \end{array}$	$8\frac{4}{5} - 6\frac{2}{5} =$	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$4\overline{)573}$
$\begin{array}{r} 197 \\ - 74 \\ \hline \end{array}$	$\frac{5}{8} + \frac{2}{8} =$	$\begin{array}{r} 7273 \\ - 387 \\ \hline \end{array}$	$\begin{array}{r} 19 \\ \times 11 \\ \hline \end{array}$	$9\frac{7}{12} - 1\frac{4}{12} =$
$8\overline{)642}$	$7\overline{)49}$	$\begin{array}{r} 99 \\ \times 72 \\ \hline \end{array}$	$\frac{1}{4} + \frac{2}{4} =$	$\begin{array}{r} 526 \\ \times 6 \\ \hline \end{array}$
$8\frac{9}{10} - 1\frac{5}{10} =$	$\frac{1}{3} + \frac{1}{3} =$	$\frac{9}{12} - \frac{2}{12} =$	$\begin{array}{r} 829 \\ \times 7 \\ \hline \end{array}$	$6\overline{)939}$
$3\overline{)397}$	$\begin{array}{r} 65 \\ \times 23 \\ \hline \end{array}$	$\begin{array}{r} 2414 \\ - 668 \\ \hline \end{array}$	$\begin{array}{r} 7568 \\ +1638 \\ \hline \end{array}$	$\begin{array}{r} 34 \\ \times 12 \\ \hline \end{array}$

Total: \_\_\_\_\_

1. How many circles are there in total?



\_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

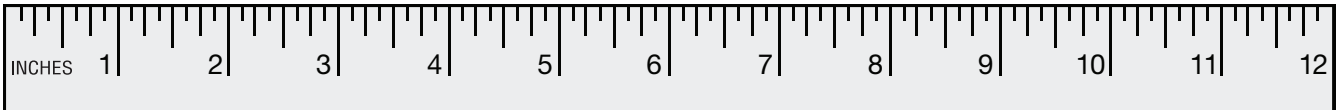
2. How many shares is the rectangle divided into? \_\_\_\_\_ shares.



3. Compare the number in Box 1 with the number in Box 2. Fill in the blank with > (greater than), = (equal to), or < (less than):

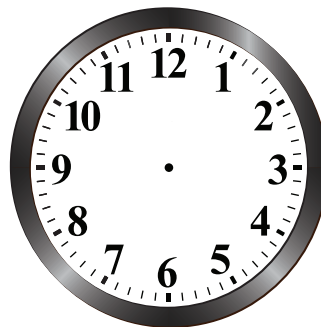
Box 1	>, =, <	Box 2
276		437
797		772
172		623

4. What is the length of the line in inches? \_\_\_\_\_ inches.



5. Sally has 4 red toy cars, 5 blue toy cars, and 6 green toy cars. How many toy cars does she have in total?  
\_\_\_\_\_ toy cars.

6. Draw the time on the clock:



Total: \_\_\_\_\_

1. At the aquarium there were 24 zebra fish and 61 clown fish. What is the ratio of zebra fish to clown fish? \_\_\_\_\_

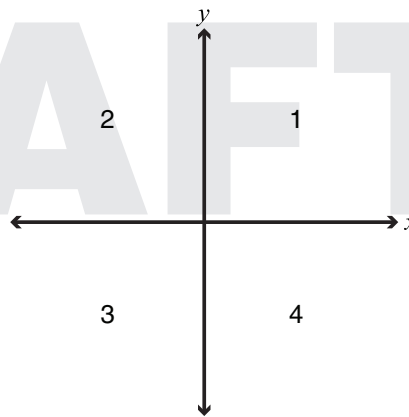
2. Doug delivers papers to houses on the weekends. The following are the number of papers that Doug delivered: **5, 2, 9, 9, 5**.

What is the mean number of papers that Doug delivered? \_\_\_\_\_

What is the median number of papers that Doug delivered? \_\_\_\_\_

3. Fill in the missing quadrants to complete the table:

Point	Quadrant
(-5, 7)	
(-5, -5)	
(4, -7)	4
(1, 7)	



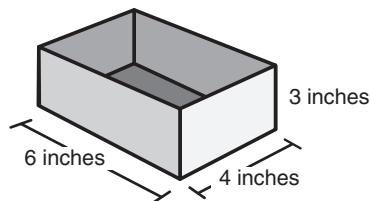
4. A. Write an expression for **8 subtracted from x**: \_\_\_\_\_

B. Write an expression for **5 added to x**: \_\_\_\_\_

5. Roy has a box and a bag of blocks that are  $\frac{1}{2}$  inch by  $\frac{1}{2}$  inch.

A. What is the volume of the box? \_\_\_\_\_ in<sup>3</sup>.

B. How many blocks will fit inside Roy's box?  
\_\_\_\_\_ blocks.



6. It takes Aunt Jen 2 weeks to make 6 hats. How long will it take Aunt Jen to make 9 hats? \_\_\_\_\_ weeks.