

# Process Standards Rubric

## The Five Strands of Math - Big Book

Number and Operations • Algebra • Geometry • Measurement • Data Analysis and Probability  
All Five Strands of Math

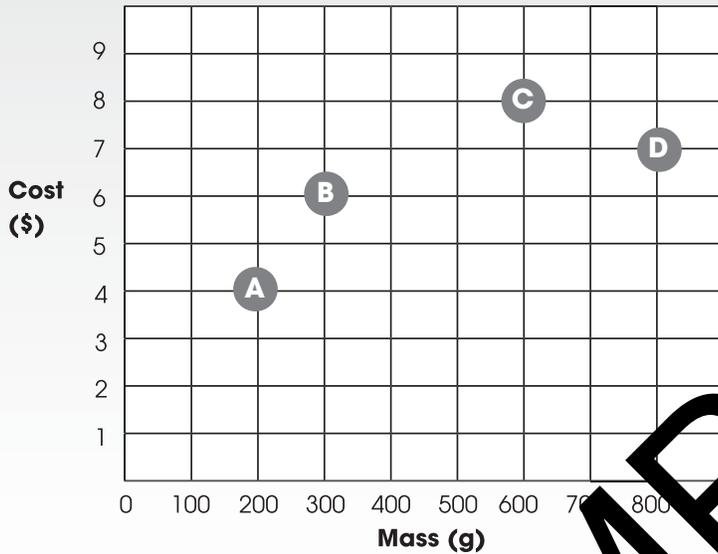
Expectations Instructional programs from pre-kindergarten through grade 12 should enable all students to:	Exercise																																																																																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																																																																																
GOAL 1: Problem Solving	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
GOAL 2: Reasoning & Proof	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 3: Communication	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 4: Connections	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 5: Representation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Drill Sheet 2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review B	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Review C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

SAMPLE



# Task Sheet 8

8) The following graph shows the relationship between the mass and cost of four different brands of maple syrup.



Which statement is true?

- a) Brand A has the lowest cost. Yes  No
- b) Brand B has the smallest mass. Yes  No
- c) Brand C has the highest cost per gram. Yes  No

## Show Your Work



Yes  No

## Explore With Technology



Visit the website <http://www.cut-the-knot.org>, and experience challenging and interactive algebraic problems.

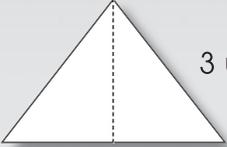
Click on the different activities listed under the Algebra section. See how many problems you can solve.

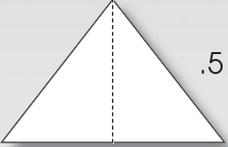
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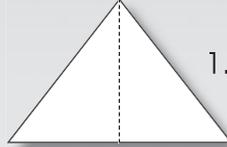


# Drill Sheet 2

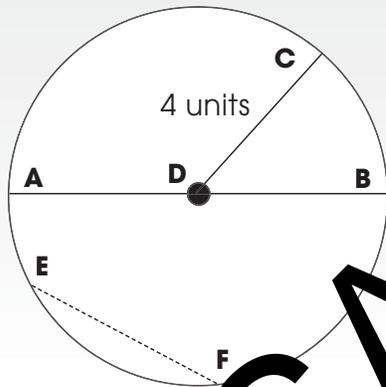
Find the area of each triangle below.

a)  3 units  
5 units  
\_\_\_\_\_ square units

b)  5 units  
4 units  
\_\_\_\_\_ square units

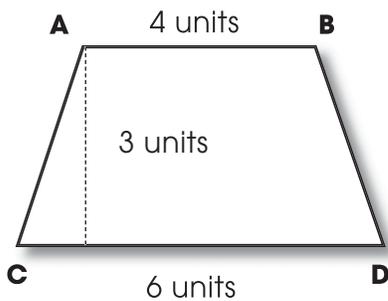
c)  1.5 units  
6 units  
\_\_\_\_\_ square units

Use the circle to answer the questions.



- d) Which line segment is the diameter? \_\_\_\_\_  
Which line segment is the chord? \_\_\_\_\_
- f) Which line segment is the radius? \_\_\_\_\_
- g) What is the area of the circle? \_\_\_\_\_
- h) What is the diameter of the circle? \_\_\_\_\_

Use the shape below to answer the questions.



- i) What is the name of this shape? \_\_\_\_\_
- j) Which two lines are parallel? \_\_\_\_\_
- k) What is the height of the trapezoid? \_\_\_\_\_
- l) What is the area of the trapezoid? \_\_\_\_\_

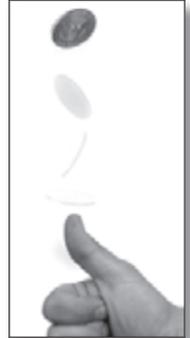
NAME: \_\_\_\_\_



# Task Sheet 5

- 5) Olaf, Marta, Freya, and Rolf, tossed their coins in the air 15 times each. They recorded the number of times they got heads and tails.

Person	Heads	Tails
Olaf	10	5
Marta	6	9
Freya	3	12
Rolf	13	2



- a) What patterns do you see in the data in the table?

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- b) What inferences can you make about the data in the table?

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- c) What two questions can you ask that can be answered by the data in the table?

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- d) If all four people flipped their coin 5 more times, what would the probability be for the difference between the number of times heads and tails were chosen to remain the same?

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