Grade 5

Released Items

5N2

<u>**Number Operations and Concepts**</u> - Understand ways to represent numbers, relationships among numbers, and number systems

---

Which of these statements is true?

A $\dfrac{5}{12} > \dfrac{7}{12}$

B $\dfrac{5}{6} < \dfrac{3}{6}$

C $\dfrac{7}{10} < \dfrac{9}{10}$

D $\dfrac{3}{9} > \dfrac{5}{9}$

5N3

Casey has $52.47 in her savings account. Samuel has $52.97 in his savings account. How much more money does Casey need in her account to have the same amount of money as Samuel has in his account?

A $0.02

B $0.47

C $0.50

D $0.57

Jane has saved $25. She wants to buy a CD that costs $12.76, tax included.

Part A. How much money will Jane have left if she buys the CD? In the space below, show or explain how you got your answer.

Amount of Money: _____

_____

_____

Part B. If Jane wants to buy 1 more CD at the same price, how much more money will she need? In the space below, show or explain how you got your answer.
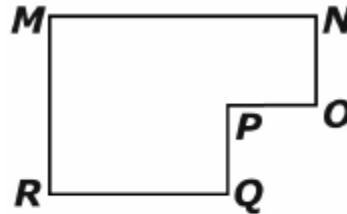
Amount of Money: _____

_____

_____

5G1

Cara drew the shape below.

5348

Which two line segments appear to be perpendicular?

A. $\overline{QP}$ and $\overline{PO}$

B. $\overline{QR}$ and $\overline{MN}$

C. $\overline{NO}$ and $\overline{MR}$

D. $\overline{RQ}$ and $\overline{PO}$

5G2

<u>Geometry</u> - Analyze characteristics and properties of two- and three-dimensional geometric shapes
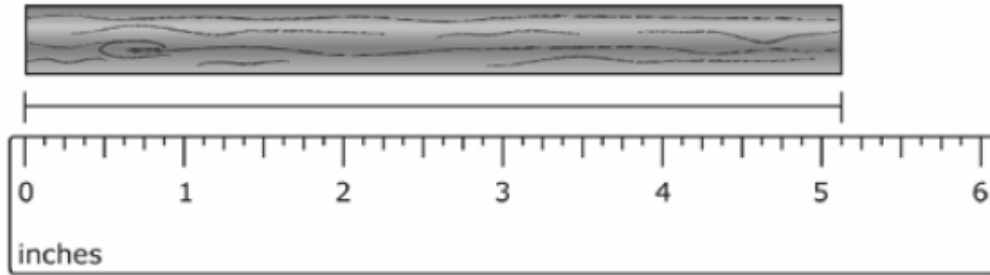
5G3

Geometry - Apply transformations and use symmetry to analyze mathematical situations

5M1

Use the ruler shown to answer the following question.

The drawing below represents a piece of wood Juan used for an art project.
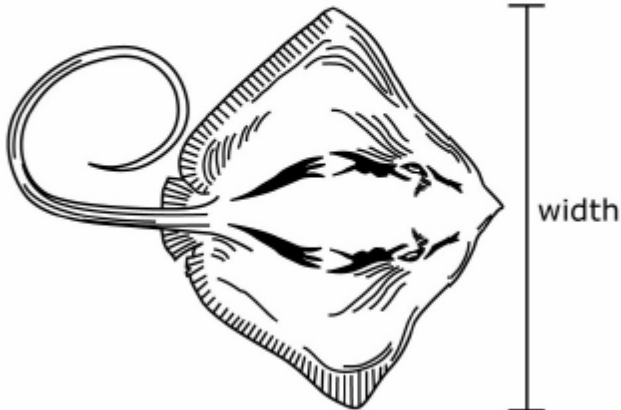

Which of the following is closest to the length of the piece of wood in the drawing?

A $5\frac{1}{8}$ inches

C $5\frac{1}{16}$ inches

B $5\frac{1}{4}$ inches

D 5 inches

Pictured below is a sea creature called a stingray. The width of the largest known stingray is about the same as the height of an average doorway.

Which of these is the most reasonable width of the largest known stingray?
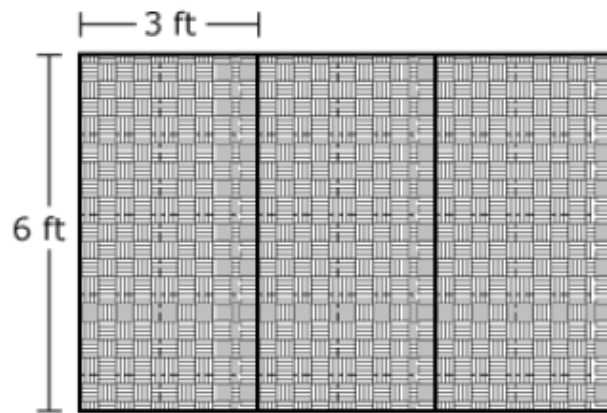
A . 7 inches

B . 7 feet

C . 7 yards

D . 7 miles

5M2

Measurement - Apply appropriate techniques, tools, and formulas to determine perimeter, area or volume

Many Japanese homes have thick, woven straw mats on their floors called "tatamis." A tatami is rectangular in shape and usually measures 3 feet by 6 feet.

If 3 tatamis were laid side-by-side without overlapping, what would be the outside perimeter of all 3 tatamis?

A 15 ft   C 24 ft

B 18 ft   D 30 ft

5A1

5A1

Algebra - Understand patterns, relations, and functions

Justin created the pattern shown below.

2, 5, 11, 23

Part A. What rule could Justin have used to create the pattern? Write your answer in the space below.

Rule: _____

Part B. Using the same rule from Part A, make a new pattern that starts with the number 7 and extends four more places. Complete the new pattern in the spaces below. Show or explain how you got your answers.

New Pattern: 7, _____, _____, _____, _____

_____

_____

_____

The table shows the number of ribbons Tessa uses to decorate different numbers of gift baskets.

Tessa's Gift Baskets

Number of Baskets	Number of Ribbons Used
1	3
2	6
3	9
4	12
5	?

Based on the pattern of the number of ribbons Tessa uses, how many ribbons will Tessa use to decorate 5 baskets?

A . 13

B . 15

C . 17

D . 21

Mr. Rawlings is raising a pig named Petunia to show in the annual fair.

- Petunia now weighs 209 pounds.
- To be entered in the fair, a pig must weigh between 240 and 260 pounds.
- Mr. Rawlings has 3 weeks to increase Petunia's weight to the weight required for entry in the fair.

Mr. Rawlings can choose Food A or Food B for his feeding plan for Petunia. The amount of weight Petunia will gain for each plan is shown below.

- Food A: Petunia will gain about 2 pounds per day.
- Food B: Petunia will gain about 10 pounds per week.

Which feeding plan will get Petunia to the weight required for entry in the fair in 3 weeks? Write your answer in the space below. Show or explain how you got your answer.

Feeding Plan: _____

_____

_____

_____

5A2

Algebra - Use mathematical models to represent and understand quantitative relationships

5D1

Students in three different grades were asked if they prefer pizza or hamburgers. The results of the survey are shown in the table below.

Pizza vs. Hamburgers Survey Results

	Grade 3	Grade 4	Grade 5
Pizza	26	22	28
Hamburgers	32	33	34

Part A. On the grid provided below, create a double bar graph that represents the results of the survey. Be sure to label each axis and give the graph a title.
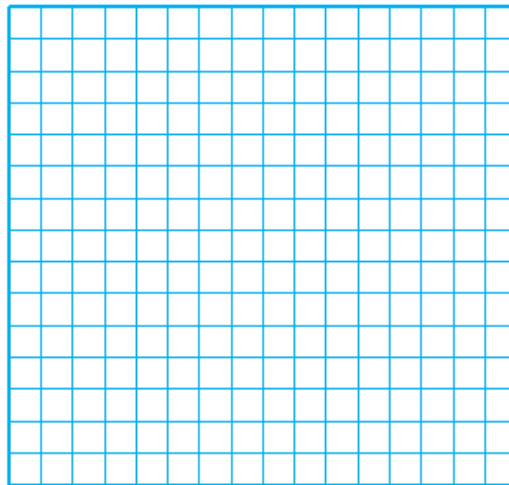
Part B. Which grade had the most responses? In the space below, show or explain how you got your answer.

Grade: _____

_____

5D2

Antonia is selecting an outfit to wear for her school picture. She will select 1 color of blouse and 1 type of skirt from her favorites listed below.

- blouses – tan, blue, white, green
- skirts – striped, solid

What is the total number of different combinations of 1 color of blouse and 1 type of skirt from which Antonia can select?

A   2

B   6

C   8

D 15