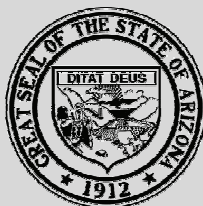


**AIMS Grade 3 Mathematics Sample Test and Think-Throughs**

**FOR STUDENTS**

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**GRADE 3**



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## Introduction

### Dear Students,

This AIMS sample test is meant to give you experience in taking AIMS. The samples are not supposed to be a practice test. They give you a sample of the kinds of questions that you can find on AIMS. The best way to make sure you can Meet and Exceed on AIMS is to *be in class, be prepared, and be on time to class* each day. Learning in class and through homework is the way to meet your goals on AIMS.

Sometimes students get nervous when taking tests. They may need some help with test-taking strategies. In this document, you can take an AIMS sample test for mathematics. You will see that some of the items have explanations of how to solve the problems. This will help you think through the questions, just like you do in class. There are also more problems like the ones explained, so you can try them on your own or with your teacher.

When you look at the sample problems that show the solution process, you will also see listed on the answer key the Strand, Concept, and Performance Objective that is being measured. This is listed so you can see how it connects to the lessons your teacher creates from the AZ Academic Standards. Read through the samples and see how your thoughts and answers compare.

Good luck and have fun!

### Teachers – Please help your students understand the following important facts.

- The AIMS Mathematics Sample Tests follow the AIMS mathematics blueprints for the 2008 Mathematics Academic Standards, but only represent half the number of items that are on the actual AIMS 3-8 and AIMS HS assessments.
- The best way to study for AIMS is to be sure students know and are able to do the grade-level performance objectives in each content area tested. Your lessons based on all of these grade-level mathematics standards are the best way that students gain necessary knowledge.
- The activities contained in this document will give experience in taking AIMS. It is not a practice test. Students should practice by doing homework.
- Students should work through the sample test as if it is the AIMS – don't allow them to use a calculator or any other support materials.

# Mathematics Sample Test

## Grade 3

**Directions:****Read each problem and select the best answer.**

- 1 Which fraction belongs in the box to make the number sentence true?

$$\boxed{\phantom{000}} > \frac{2}{3}$$

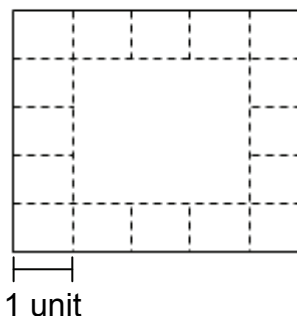
- (A)  $\frac{1}{2}$
- (B)  $\frac{3}{4}$
- (C)  $\frac{2}{5}$
- (D)  $\frac{5}{8}$
- 2 The table shows a relationship between the number of sets of dishes and the number of plates in the sets.

Sets of Dishes	Plates
2	8
3	12
4	16

How many plates are in 1 set of dishes?

- 3 Kari had a page of stamps. She used some of the stamps from the center of the page. The picture below shows the stamps Kari has left.

**Kari's Stamps**

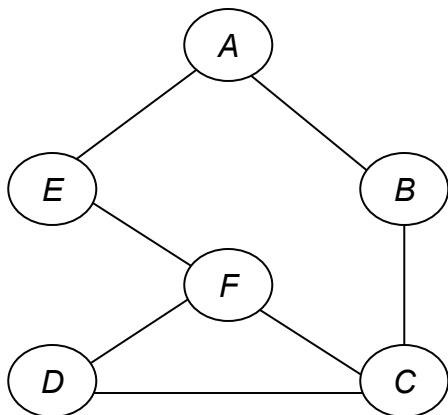


How much of the page of stamps did Kari use?

- (A) 6 square units
- (B) 9 square units
- (C) 12 square units
- (D) 16 square units
- 4 Gloria and her 3 friends will share a pizza equally. Which fraction shows the portion of the pizza each person will receive?
- (A)  $\frac{1}{4}$
- (B)  $\frac{1}{3}$
- (C)  $\frac{3}{8}$
- (D)  $\frac{3}{4}$

**Go On** ►

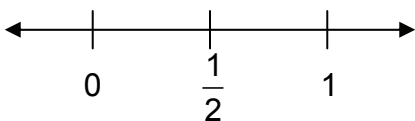
5 Look at the vertex-edge graph.



How many different paths can be traveled from vertex *A* to vertex *D* by visiting a vertex **only** once?

- (A) 2
- (B) 3
- (C) 4
- (D) 5

6 Which fraction is closest to 0 on a number line?



- (A)  $\frac{1}{3}$
- (B)  $\frac{1}{4}$
- (C)  $\frac{1}{5}$
- (D)  $\frac{1}{6}$

7 Abby, Zach, and Beth had a jump rope contest. The chart below shows the length of time each child jumped rope.

**Jump Rope Contest**

Child	Time (in minutes)
Abby	6
Zach	7
Beth	6

Based on this information, which statement is true?

- (A) Abby is a champion at jump rope.
- (B) Beth jumped rope longer than Abby or Zach.
- (C) All 3 children can jump rope for more than 5 minutes.
- (D) Zach jumped rope for more minutes than the other two jumped together.

8 What is the sum of the numbers shown?

$$\begin{array}{r} 543 \\ + 171 \\ \hline \end{array}$$

- (A) 632
- (B) 634
- (C) 714
- (D) 734

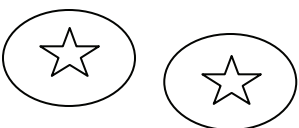
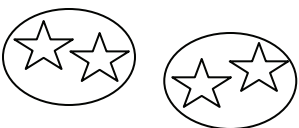
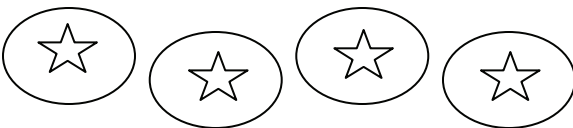
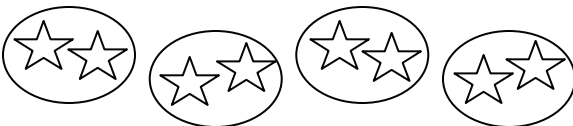
9 The jar below has 21 beans in it.



About how many beans will be in the jar when it is full?

- (A) 40
- (B) 50
- (C) 60
- (D) 80

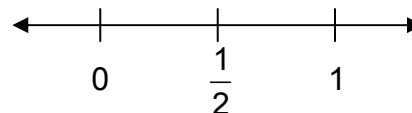
10 Which figure shows 4 X 2?

- (A) 
- (B) 
- (C) 
- (D) 

11 Amber had 13 pencils. She gave some of them away. Now she has 6 left. Which equation could show how many pencils Amber gave away?

- (A)  $13 - \square = 6$
- (B)  $13 - \square = 7$
- (C)  $13 + \square = 6$
- (D)  $13 + \square = 7$

12 Which fraction is between  $\frac{3}{4}$  and 1 on a number line?



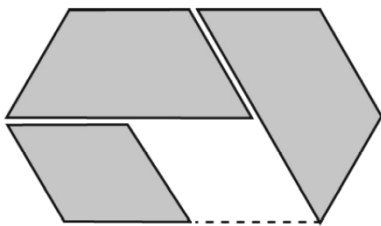
- (A)  $\frac{1}{8}$
- (B)  $\frac{3}{8}$
- (C)  $\frac{6}{8}$
- (D)  $\frac{7}{8}$

13 Mario knows that a 1-quart jar holds 4 cups of lemonade. He will make 8 cups of lemonade. How many 1-quart jars will Mario need?

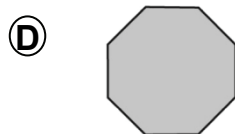
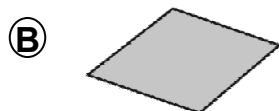
- (A) 2
- (B) 4
- (C) 12
- (D) 32

**Go On** 

**14** Look at the puzzle.



Which piece completes the puzzle?



**15** What number is missing from the sequence?

0, 4, 8, \_\_\_\_, 16, 20, ...

- (A)** 10
- (B)** 12
- (C)** 14
- (D)** 24

**16** Mike is saving his pennies. When he saves 695, he will buy some school supplies. Mike has 427. How many more does he need to reach his goal?

- (A)** 168
- (B)** 268
- (C)** 278
- (D)** 1122

**17** The table shows the possible food choices for lunch.

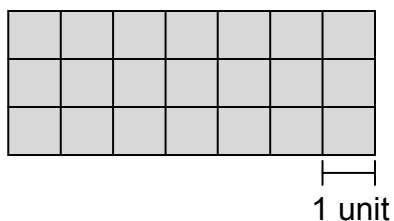
**Lunch Choices**

Soup	Sandwich	Salad
Chicken	Ham	Vegetable
Tomato	Turkey	Fruit

How many different lunches can be made that include 1 type of soup, 1 type of sandwich, and 1 type of salad?

- (A)** 2
- (B)** 3
- (C)** 6
- (D)** 8

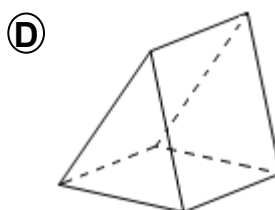
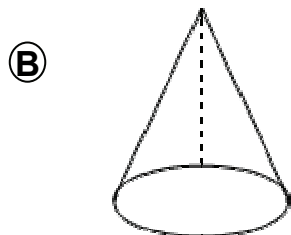
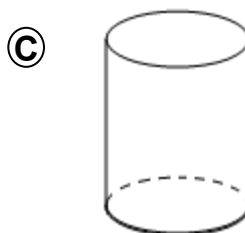
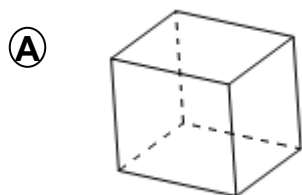
**18** Look at the array.



What is the perimeter of this array?

- (A) 14 units
- (B) 18 units
- (C) 20 units
- (D) 21 units

**19** Which figure has only one base and one vertex?



**20** Mr. Jacob's class is going on a field trip. They need to split into groups of 4 students. If there are 24 students in Mr. Jacob's class, how many groups will there be?

- (A) 4
- (B) 5
- (C) 6
- (D) 7

**Go On ►**



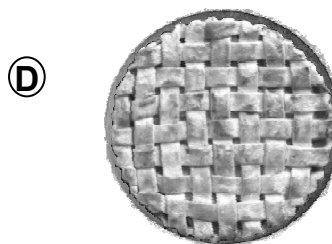
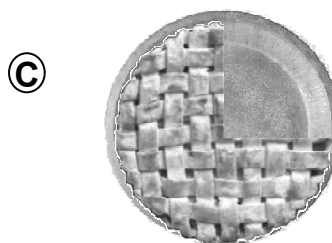
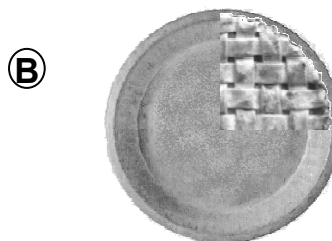
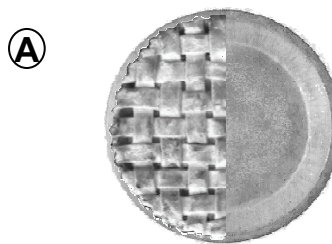
- 21** Sara used a rule to create the numbers in the input-output table.

Input	Output
1	3
2	4
3	5
4	6

What rule did Sara use?

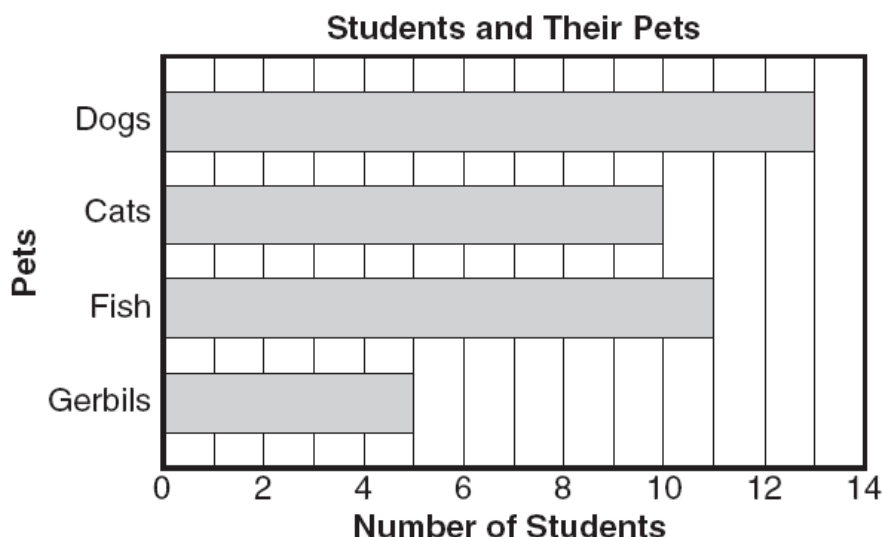
- (A) add 2
  - (B) add 3
  - (C) multiply by 2
  - (D) multiply by 3
- 22** Jackie's mom baked cookies. Jackie wants to share the cookies equally with five friends. What information is needed to determine how many cookies each person could get?
- (A) the kind of cookies
  - (B) the size of the cookies
  - (C) the number of cookies baked
  - (D) the time it took to bake the cookies

- 23** Joe's family had pie for dessert. They ate  $\frac{3}{4}$  of the pie. Which picture shows how much pie Joe's family has left?



**Use the bar graph to answer Numbers 24 through 26.**

The bar graph shows the results of a survey about pets from Mr. Hall's class.



**24** Based on the graph, how many **more** students have dogs than gerbils?

- (A) 5
- (B) 8
- (C) 9
- (D) 13

**25** What is the most popular pet in Mr. Hall's class?

- (A) Dogs
- (B) Cats
- (C) Fish
- (D) Gerbils

**26** Ms. Ryan asked each student in her class if they have any pets. Her results are shown below.

- 4 students have only cats
- 12 students have only dogs
- 5 students have a dog and a cat
- 8 students have fish
- No students have pet gerbils

Based on the information from the graph and from Ms. Ryan's class, which statement is **most** likely true?

- (A) Cats are better pets than Fish.
- (B) Fish are better pets than Dogs.
- (C) Gerbils are the most popular pet.
- (D) Gerbils are the least popular pet.

**Go On ►**

- 27** What are the next 2 terms in the sequence?

71, 62, 53, 44, \_\_\_\_, \_\_\_\_, ...

- (A) 35, 26
- (B) 33, 24
- (C) 35, 27
- (D) 33, 25

- 28** What is the numeric form of the number written below?

one hundred four-thousand,  
one hundred three

- (A) 1,413
- (B) 14,103
- (C) 104,103
- (D) 104,113

- 29** The pool at the park is about 96 feet long. If Randy swims across the length of the pool 2 times, about how many feet will he swim?

- (A) 100 feet
- (B) 200 feet
- (C) 300 feet
- (D) 400 feet

- 30** Rusty helps his teacher pass out books 4 times a day. How many times does Rusty help his teacher in 5 days?

- (A) 5
- (B) 9
- (C) 20
- (D) 25

- 31** Which number means the same as the one below?

$70,000 + 3,000 + 200 + 40 + 7$

- (A) 73,207
- (B) 73,247
- (C) 703,247
- (D) 713,247

- 32** Morgan solved the problem below for her homework.

$$7 \times 3 = 21$$

What can Morgan do to check her answer?

- (A) Take 21 and add it to 3.
- (B) Take 21 and subtract 3.
- (C) Take 21 and divide it by 3.
- (D) Take 21 and multiply it by 3.

**33** Which object is a cylinder?

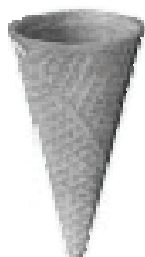
**A**



**C**



**B**



**D**



## AIMS Grade 3 Mathematics Think-Throughs & Practice Applications

The problems on the next few pages are from the sample test you just finished. They have been worked out for you to show the thought process behind finding the answers.

As you go through them, see how your thoughts compare to the ones given. Not every problem from the sample test will be shown in this same way.

The number for each problem matches the same number that is in the sample test. This way, if you got the problem incorrect, you can compare your answers and go back to see what you may have done differently.

Then, after each Think-Through problem, you will see two more problems. You can apply what you just learned from the Think-Through problems. These will be very similar to the Think-Through problem. They are also testing the same academic performance objective. This will give you even more practice to think through your own problem-solving process.

As you read through the solution process of the problems, you may notice that some of the words are *italicized*. This means that it is a mathematics term that would be helpful to know.

After the two extra problems, there will be a Summary Statement which explains what the problems are testing. Your teacher can use this to help you understand what each problem is testing. It will help you both to understand which concepts you may need more work on or which concepts you may have mastered.

- 4** Gloria and her 3 friends will share a pizza equally. Which fraction shows the portion of the pizza each person will receive?

- (A)  $\frac{1}{4}$
- (B)  $\frac{1}{3}$
- (C)  $\frac{3}{8}$
- (D)  $\frac{3}{4}$

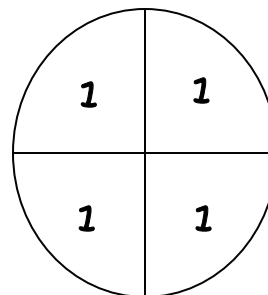
What does this problem want me to do? I have to figure out which fraction shows how much pizza each person can have.

I know that there are 4 people eating the pizza. The problem tells me that Gloria and her 3 friends will share the pizza.

**Gloria + 3 friends = 4 people**

The problem also says that they will share the pizza equally. This means that each person will get the same amount of pizza. I will draw a figure to see how much each person can have. A whole pizza divided into 4 equal pieces will give each person an equal share.

**4 people with equal shares**



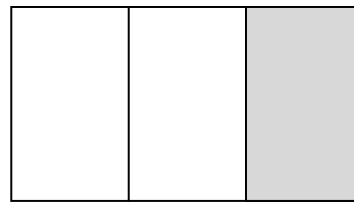
This means that each person can have 1 part of the pizza. And, since the whole pizza is divided into 4 parts, each person can have one-fourth of the pizza.

This is also written as  $\frac{1}{4}$ . This is answer choice **A**.

**4a** John made some brownies to share equally among himself and his 7 friends. What fraction of the brownies can each person have?

- (A)  $\frac{1}{8}$
- (B)  $\frac{1}{7}$
- (C)  $\frac{1}{2}$
- (D)  $\frac{7}{8}$

**4b** What part of the image is shaded?



- (A)  $\frac{1}{4}$
- (B)  $\frac{1}{3}$
- (C)  $\frac{2}{3}$
- (D)  $\frac{3}{4}$

**Summary Statement:**

These problems include expressing benchmark fractions as a fair sharing, parts of a whole, or parts of a set.

- 7 Abby, Zach, and Beth had a jump rope contest. The chart below shows the length of time each child jumped rope.

**Jump Rope Contest**

Child	Time (in minutes)
Abby	6
Zach	7
Beth	6

Based on this information, which statement is true?

- (A) Abby is a champion at jump rope.
- (B) Beth jumped rope longer than Abby or Zach.
- (C) All 3 children can jump rope for more than 5 minutes.
- (D) Zach jumped rope for more than the other two jumped together.

I need to figure out which statement is true. This means I have to look at each answer choice and compare them to the information that is given in the chart.

**Jump Rope Contest**

Child	Time (in minutes)
Abby	6
Zach	7
Beth	6

**Answer choice A says: Abby is a champion at jump rope.**

There is no way of knowing this from the chart. It does not say that Abby is a champion. She had the same time as Beth so she can't be a champion. Based on the information, this is **not** true.

**Answer choice B says: Beth jumped rope longer than Abby or Zach.**

According to the chart, Beth jumped rope for 6 minutes. Abby jumped rope for 6 minutes and Zach jumped for 7 minutes. So, Beth did not jump longer than anyone. She jumped rope for the same time as Beth and 1 minute less than Zach. This statement is **not** true.

(continued on page 18)



**Jump Rope Contest**

<b>Child</b>	<b>Time (in minutes)</b>
Abby	6
Zach	7
Beth	6

**Answer choice C says: All 3 children can jump rope for more than 5 minutes.**

I see that Abby jumped rope for 6 minutes. Zach jumped rope for 7 minutes. And, Beth jumped rope for 6 minutes. 6 minutes and 7 minutes are more than 5 minutes, so **this statement is true**. To be sure, I will check the last answer choice.

**Answer choice D says: Zach jumped rope for more than the other two jumped together.** Beth jumped rope for 6 minutes and Abby jumped rope for 6 minutes.

$6 \text{ minutes} + 6 \text{ minutes} = 12 \text{ minutes}$ . Zach jumped rope for only 7 minutes. That is not more than the other two together. This statement is **not** true.

The statement that is true is answer choice **C**. It is important to check all answer choices to be certain of the correct answer.

- 7a** Ben made a chart showing how much time he spends on homework in one week.

**Time Spent on Homework**

Day	Minutes
Monday	20
Tuesday	45
Wednesday	45
Thursday	30
Friday	30

Based on the information in the chart, which statement is true?

- Ⓐ Ben has no homework on Monday.
- Ⓑ Ben spends the most time on homework on Friday.
- Ⓒ Ben spends the least amount of time on homework on Wednesday.
- Ⓓ Ben spends more time on homework on Tuesday than on Thursday.

- 7b** Mr. Jones, Ms. Vinny, and Ms. Martin each asked their classes to bring in cans for the school food drive. They put their results in a chart.

**Food Drive Results**

Class	Cans
Mr. Jones	47
Ms. Vinny	94
Ms. Martin	56

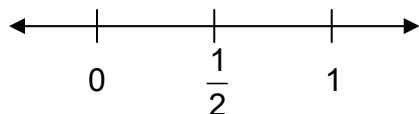
Based on the information in the chart, which statement is **not** true?

- Ⓐ Ms. Vinny's class brought the most cans.
- Ⓑ Ms. Martin's class brought the least amount of cans.
- Ⓒ Mr. Jones's class brought in fewer cans than Ms. Martin's class.
- Ⓓ Mr. Jones's class brought half as many cans as Ms. Vinny's class.

**Summary Statement:**

These problems include summarizing mathematical information, explaining reasoning, and drawing conclusions.

- 12** Which fraction is between  $\frac{3}{4}$  and 1 on a number line?



- (A)  $\frac{1}{8}$   
 (B)  $\frac{3}{8}$   
 (C)  $\frac{6}{8}$   
 (D)  $\frac{7}{8}$

This problem is asking me to find which number from the answer choices is between  $\frac{3}{4}$  and 1 on a number line. I will look at each answer choice and plot them on my number line in order to figure this out.

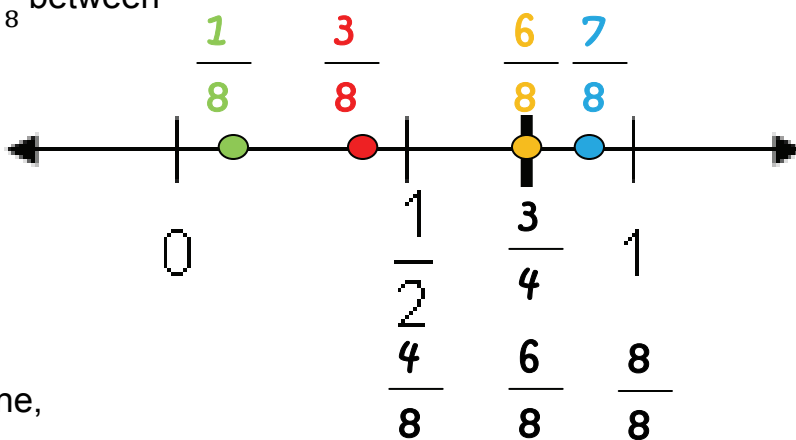
I have 0 through 1 to plot my points on the number line. I can think of 1 as  $\frac{8}{8}$ . Also, since I have to find out which fraction is between  $\frac{3}{4}$  and 1, I will plot  $\frac{3}{4}$ .  $\frac{3}{4}$  is the same as  $\frac{6}{8}$ .

$\frac{1}{2}$  is the same as  $\frac{4}{8}$ . So I plot  $\frac{1}{8}$  and  $\frac{3}{8}$  between

0 and  $\frac{1}{2}$ .

Then I plot  $\frac{7}{8}$  on the number line.

$\frac{7}{8}$  is between  $\frac{6}{8}$  and  $\frac{8}{8}$ .



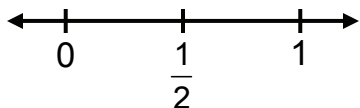
Now when I look at each of the fractions I plotted on the number line, the only fraction that is between

$\frac{3}{4}$  and 1, is  $\frac{7}{8}$ .

This is answer choice **D**.

It really helped me to use my number line to solve this problem.

**12a** Which fraction is greater than  $\frac{1}{2}$ ?



- (A)  $\frac{1}{6}$
- (B)  $\frac{2}{6}$
- (C)  $\frac{3}{6}$
- (D)  $\frac{4}{6}$

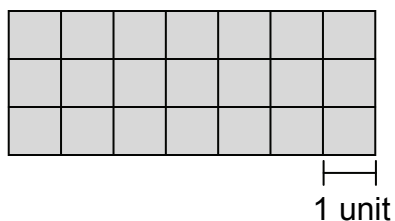
**12b** Which list shows the fractions in order from **least** to **greatest**?

- (A)  $\frac{1}{2}, \frac{1}{4}, \frac{1}{3}$
- (B)  $\frac{1}{3}, \frac{1}{2}, \frac{1}{4}$
- (C)  $\frac{1}{4}, \frac{1}{3}, \frac{1}{2}$
- (D)  $\frac{1}{4}, \frac{1}{2}, \frac{1}{3}$

**Summary Statement:**

These problems include comparing and ordering benchmark fractions.

- 18** Look at the array.

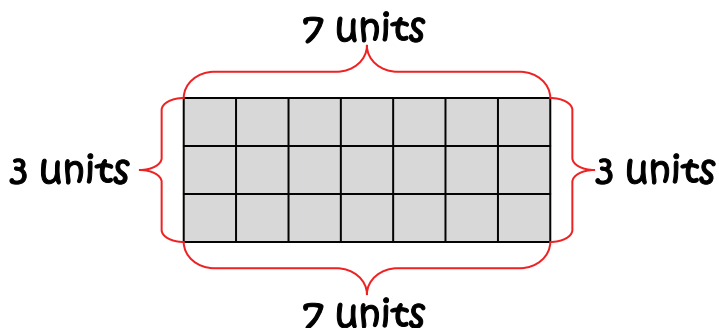


What is the perimeter of this array?

- (A) 14 units
- (B) 18 units
- (C) 20 units
- (D) 21 units

What is this problem asking me to do? I have to find the *perimeter* of the *array*. I don't really remember what an *array* is, but that is okay. I know what *perimeter* is. That is the distance around something. So, I will find the *perimeter*.

Looking at the figure (*array*), I will count the length of each side.

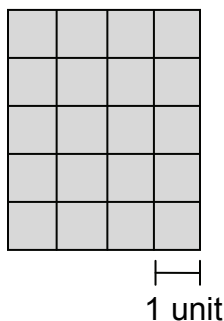


Once I have the length of each side, I will add all distances together. This will give me the total distance around the figure (*array*), or the *perimeter*.

$$\begin{array}{r}
 7 \text{ units} \\
 3 \text{ units} \\
 3 \text{ units} \\
 + 7 \text{ units} \\
 \hline
 20 \text{ units}
 \end{array}$$

The *perimeter* of the figure (*array*) is 20 units, or answer choice **C**.

**18a** Look at the figure.



What is the perimeter?

- (A) 9 units
- (B) 15 units
- (C) 18 units
- (D) 20 units

**18b** Sal is building a fence around the perimeter of his yard for his dog. His yard is the shape of a rectangle. It is 5 yards long and 7 yards wide. What is the perimeter of Sal's fence?

- (A) 12 yards
- (B) 20 yards
- (C) 24 yards
- (D) 35 yards

**Summary Statement:**

These problems involve the measuring and calculating of the perimeters of 2-dimensional figures.

**21** Sara used a rule to create the numbers in the input-output table.

Input	Output
1	3
2	4
3	5
4	6

What rule did Sara use?

- (A) add 2
- (B) add 3
- (C) multiply by 2
- (D) multiply by 3

This question is asking me to find the rule that Sara used in her input-output table. I remember what an input-output table is. It is a table that has number values in it. On the input side are some numbers. Then, the same thing was done to each number – this is the rule I'm trying to find. The outcomes are the numbers listed in the output side. So, I need to look at the input numbers and figure out how they became the output numbers.

First, I will start with the 1.

What is the difference from 1 to 3?

It looks like 2 was added.

Next, I look at the 2. What is the difference from 2 to 4?

It looks like 2 was also added here.

I will check the last 2 numbers on the input side.

Input	Output	
1	3	$1 + 2 = 3$
2	4	$2 + 2 = 4$
3	5	$3 + 2 = 5$
4	6	$4 + 2 = 6$

It looks like each value on the output side was created by adding 2 to the input

value. This means that the rule for Sara's input-output table is to add 2. This rule matches answer choice **A**.

**21a** Look at the input-output table.

Input	Output
2	10
3	15
4	20
5	25

What rule is used for the input-output table?

- (A) add 8
- (B) subtract 8
- (C) divide by 5
- (D) multiply by 5

**21b** Jeff created the input-output table below.

Input	Output
9	6
12	9
15	12
18	15

What rule did Jeff use to create his table?

- (A) subtract 3
- (B) subtract 6
- (C) divide by 3
- (D) divide by 6

**Summary Statement:**

These problems involve recognizing and describing a relationship between two quantities, given by a chart, table, or graph, in which the quantities change proportionally, using words, pictures, or expressions.



**22** Jackie's mom baked cookies. Jackie wants to share the cookies equally with five friends. What information is needed to determine how many cookies each person could get?

- (A) the kind of cookies
- (B) the size of the cookies
- (C) the number of cookies baked
- (D) the time it took to bake the cookies

What do I need to do for this problem? I don't think I need to solve anything. I will see what I know.

- **Jackie's mom baked cookies.**
- **Jackie wants to share the cookies equally.**
- **Jackie has 5 friends.**

I need to decide which piece of information is needed to figure out how many cookies each person can have. I will look at each answer choice and decide if it is needed to figure out how many cookies each person can have.

**Answer choice A is the kind of cookies.**

This does not really matter when it comes to sharing cookies equally among people. This is **not** needed.

**Answer choice B is the size of the cookies.**

The size of the cookies doesn't matter because Jackie is going to share all of the cookies, not split one cookie. This is **not** needed to figure out how many cookies each person can have.

**Answer choice C is the number of cookies baked.**

How many cookies that Jackie's mom made is important to know. This can tell how many total cookies there are so we know how to share all of them equally. **This information is needed**, but I will check the last one to be sure.

**Answer choice D is the time it took to bake the cookies.**

How long the cookies took to bake does not matter. This has nothing to do with sharing all of the cookies. This is **not** needed.

The number of cookies baked is the information that is missing, or answer choice **C**.

- 22a** Jimmy has \$20. He wants to take his family to a movie. What information is **not** needed to determine if Jimmy has enough money?
- Ⓐ When does the movie end?
  - Ⓑ What is the cost of each ticket?
  - Ⓒ Will anyone want to buy popcorn?
  - Ⓓ How many people are going to the movie?

- 22b** Anna is bringing cupcakes to school for her class. She will bring one for each person. What information does she need to determine how many cupcakes she should bring to school?
- Ⓐ What time does school start?
  - Ⓑ How long is the bus ride to school?
  - Ⓒ How many people are in class?
  - Ⓓ What kind of cupcake does everyone like the best?

**Summary Statement:**

These problems involve identifying relevant, missing, and extraneous information related to the solution to a problem.

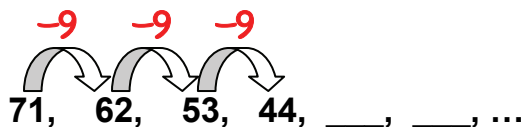
**27** What are the next 2 terms in the sequence?

71, 62, 53, 44, \_\_\_\_, \_\_\_\_, ...

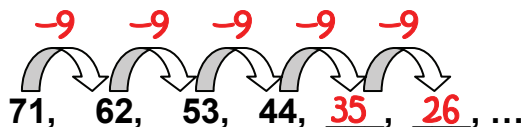
- (A) 35, 26
- (B) 33, 24
- (C) 35, 27
- (D) 33, 25

*Sequence.* I remember that a *sequence* is a list of numbers that has a pattern in it. It is kind of like an input-output table. Each number had something done to it in order to get the next number. I need to figure out how this *sequence* was made before I can find the next two *terms* in the *sequence*.

I will figure out the difference from one *term* to the next *term*.



It looks like that the first *term*, 71, had 9 subtracted from it to get the next *term*, 62. Then 62 had 9 subtracted from it to get 53. Then  $53 - 9$  is 44. So it looks like I can keep subtracting 9 from each *term* to get the next.



When I subtracted 9 from 44, I got 35. Then 9 subtracted from 35 is 26. So, the next 2 *terms* in the *sequence* are 35 and 26, or answer choice **A**.

**27a** Look at the sequence.

17, 23, 29, ?, 41

What term is missing?

- Ⓐ 26
- Ⓑ 35
- Ⓒ 37
- Ⓓ 46

**27b** What are the next two terms in the sequence?

59, 51, 43, 35,     ,     , ...

- Ⓐ 34, 26
- Ⓑ 30, 22
- Ⓒ 28, 20
- Ⓓ 27, 19

**Summary Statement:**

These problems involve recognizing, describing, extending, creating, and finding the missing terms in a numerical sequence.

**29** The pool at the park is about 96 feet long. If Randy swims across the length of the pool 2 times, about how many feet will he swim?

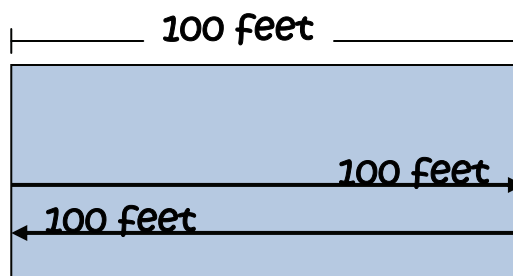
- Ⓐ 100 feet
- Ⓑ 200 feet
- Ⓒ 300 feet
- Ⓓ 400 feet

What do I need to figure out? The question is asking about how many feet Randy will swim at the pool. It asks "About how many," so it really doesn't want me to calculate to find the answer. I can *estimate* for this problem.

The problem says that the pool is 96 feet long. 96 is close to 100 so I will use 100 feet. And, I will draw a picture to help me think better.

He swam across the length 2 times.

That means he swam about 100 feet one way and then he swam 100 feet the other way. This makes 2 times across the pool.



$$100 \text{ feet} + 100 \text{ feet} = 200 \text{ feet}$$

Randy swam about 200 feet. This is answer choice **B**.

**29a** Tony is running in PE class. He will run around the perimeter of the playground 3 times. If the perimeter of the playground is 81 yards, about how many yards will Tony run?

- Ⓐ 140 yards
- Ⓑ 200 yards
- Ⓒ 240 yards
- Ⓓ 300 yards

**29b** Mr. Fredricks is baking muffins for his friends. He wants to give each friend 3 muffins. If Mr. Fredricks has 13 friends, about how many muffins will he have to bake?

- Ⓐ 15
- Ⓑ 20
- Ⓒ 25
- Ⓓ 30

**Summary Statement:**

These problems involve making estimates appropriate to a given situation or computation with whole numbers.