

Sample Items for Paper-Based Testing Mathematics Grades 6, 7, & 8

*These sample items provide examples of the **types of test questions** that will appear on the SC READY mathematics tests for grades 6, 7, and 8. The sample items are not intended to be representative of the content of the SC READY mathematics tests.*

Directions for Students: The grades 6, 7, and 8 mathematics tests will have a calculator section, followed by a no-calculator section. You may use a calculator during the calculator section only. For these sample items, you may use a calculator for the first three questions. Do not use a calculator for the last question.

For two of the sample questions, you will choose your answer from a set of four answer choices. One sample question, however, will have more than four answer choices and will ask you to select ALL answer choices that correctly answer the question. Be sure to consider whether or not each answer choice is correct.

For one sample question, you will have to record your answer in a grid. Follow the directions on the next page for answering the gridded-response question.

For the gridded-response questions:

1. Work the problem and find an answer.
2. In the answer document, write your answer in the boxes at the top of the answer grid.
 - Write only **one** digit or symbol in each box.
 - You may not need all the boxes to enter your answer, but do NOT leave a blank box in the middle of your answer.
3. Under each box in which you wrote a digit or symbol, fill in the bubble that matches that digit or symbol.
 - Fill in one and ONLY one bubble for each box with a digit or symbol. Do NOT fill in a bubble under a blank box.
 - Fill in the bubble by making a solid mark that completely fills the circle.
 - If you need to enter a fraction, you must use the decimal form.
4. The diagrams below show two examples of correctly completed answer grids.

To answer -3 , fill in the answer grid as shown here.

-	3				
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To answer $.75$, fill in the answer grid as shown here.

.	7	5			
<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

[You may use a calculator for this question.]

Four students each ran up five sets of stairs. Their times for each set of stairs, in seconds, are shown below.

Alexis	Brandon	Chloe	David
10	16	14	12
20	17	14	13
20	19	20	20
20	22	26	27
30	26	26	28

Which statement about the mean and median of the students' times shown is true?

- A. Each student has a mean time of 20 seconds, and each student has a median time of 20 seconds.
- B. Each student has a mean time of 20 seconds, but not all the students have the same median time.
- C. Not all the students have the same mean time, but each student has a median time of 20 seconds.
- D. Not all the students have the same mean time, and not all the students have the same median time.

[You may use a calculator for this question.]

Lashawn made a snack mix using the ingredients shown in the table.

Snack Mix

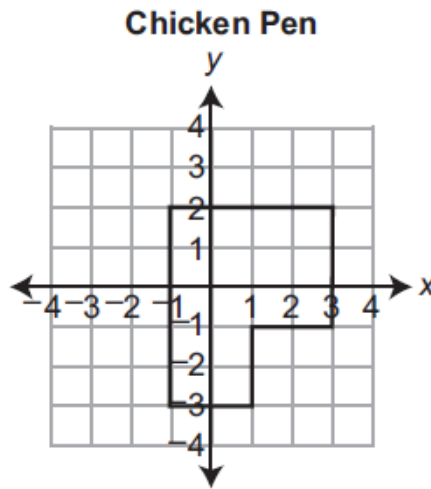
Ingredient	Amount
peanuts	$\frac{1}{4}$ cup
raisins	$\frac{1}{2}$ cup
chocolate chips	$\frac{3}{4}$ cup
granola	1 cup

Select ALL the statements that are true about the ratios of the ingredients Lashawn used to make the snack mix.

- A. The ratio of cups of raisins to cups of peanuts is 2:1.
- B. The ratio of cups of granola to cups of peanuts is 1:4.
- C. The ratio of cups of chocolate chips to cups of raisins is 3:1.
- D. The ratio of cups of raisins to cups of granola is 1:3.
- E. The ratio of cups of granola to cups of chocolate chips is 4:3.

[You may use a calculator for this question.]

Andrew draws a diagram of a chicken pen. Each unit is 1 foot long.



Find the perimeter of the chicken pen. Write your answer in the answer grid.

Be sure to follow the directions provided for completing the answer grids.

-						
.
0	0	0	0	0	0	0
1	1	1	1	1	1	1
2	2	2	2	2	2	2
3	3	3	3	3	3	3
4	4	4	4	4	4	4
5	5	5	5	5	5	5
6	6	6	6	6	6	6
7	7	7	7	7	7	7
8	8	8	8	8	8	8
9	9	9	9	9	9	9

[You may NOT use a calculator for this question.]

Haley ran 3.5 laps in 304.74 seconds. The expression shown is used to calculate the mean time, in seconds, that it took her to run one lap.

$$3.5 \overline{)304.74}$$

During which step of the calculation was the first mistake made?

Step 1 $35 \overline{)3047.4}$

Step 2
$$\begin{array}{r} 8. \\ 35 \overline{)3047.4} \\ -280 \\ \hline 247 \end{array}$$

Step 3
$$\begin{array}{r} 87. \\ 35 \overline{)3047.4} \\ -280 \\ \hline 247 \\ -245 \\ \hline 24 \end{array}$$

Step 4
$$\begin{array}{r} 87.6 \\ 35 \overline{)3047.4} \\ -280 \\ \hline 247 \\ -245 \\ \hline 240 \\ -210 \\ \hline 300 \end{array}$$

- A. Step 1
- B. Step 2
- C. Step 3
- D. Step 4