

Name: _____



New York State Testing Program

2016 Common Core Mathematics Test Book 3

Grade 7

April 13–15, 2016

Released Questions

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TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before writing your response.
- You have been provided with mathematics tools (a ruler, a protractor, and a calculator) and a reference sheet to use during the test. It is up to you to decide when each tool and the reference sheet will be helpful. You should use mathematics tools and the reference sheet whenever you think they will help you to answer the question.
- Be sure to show your work when asked.
- Plan your time.

- 52 An after-school program offers tutoring for different subjects. During the last month, a teacher recorded the number of students who participated in tutoring in each subject, as shown in the table below.

TUTORING PARTICIPATION

Subject	Number of Students
Math	40
Science	55
English	47
History	58

Explain how the teacher could use these data to predict **about** how many of the next 100 students will participate in math tutoring.

GO ON

- 53 A home-improvement store sold wind chimes for \$30 each. A customer signed up for a free membership card and received a 5% discount off the price. Sales tax of 5% was applied after the discount. What was the final price of the wind chime?

Show your work.

Answer \$_____

GO ON

- 54 Ms. Hernandez has \$100 to spend on parking and admission to the zoo. The parking will cost \$7, and admission tickets will cost \$15.50 per person, including tax. Write and solve an equation that can be used to determine the number of people that she can bring to the zoo, including herself.

Show your work.

Answer _____ people

GO ON

55 Two math classes took the same quiz. The scores of 10 randomly selected students from each class are listed below.

- Sample of Class A: 75, 80, 60, 90, 85, 80, 70, 90, 70, 65
- Sample of Class B: 95, 90, 85, 90, 100, 75, 90, 85, 90, 85

Based on the medians of the scores for each class, what inference would you make about the quiz scores of all the students in Class A compared to all the students in Class B? Explain your reasoning to justify your answer.

- 56 A contractor is building the base of a circular fountain. On the blueprint, the base of the fountain has a diameter of 18 centimeters. The blueprint has a scale of three centimeters to four feet. What will be the actual area of the base of the fountain, in square feet, after it is built? Round your answer to the nearest tenth of a square foot.

Show your work.

Answer _____ square feet

GO ON

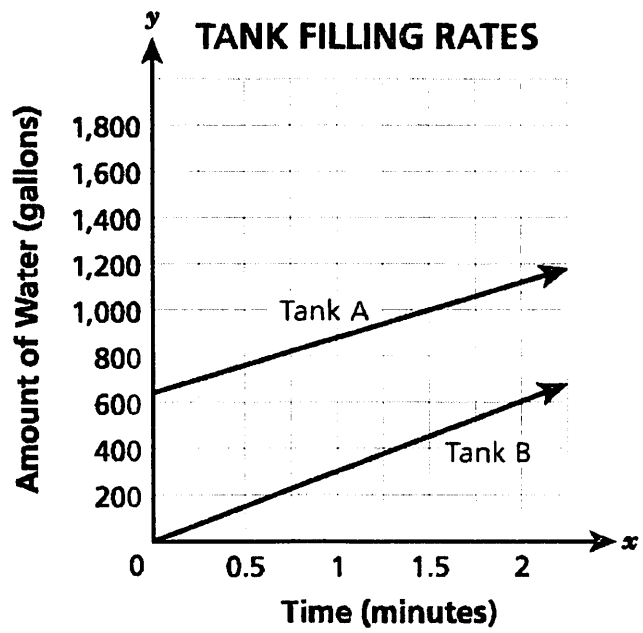
- 57 Explain the steps needed to determine the value of the expression shown below. Be sure to provide the correct value of the expression in your explanation.

$$\frac{\frac{1}{2}}{-\frac{2}{5}} + \left(-\frac{1}{4}\right)$$

Answer

GO ON

- 58 The lines graphed below show the amounts of water in two tanks as they were being filled over time.



For each tank, explain whether or not there is a proportional relationship between the amount of water, in gallons, and the time, in minutes. If there is a proportional relationship, identify the unit rate. Use specific features of the graph to support your answer.

GO ON

59 Trent is fishing from a pier.

- The tip of his fishing rod is $53\frac{3}{4}$ feet above the surface of the water.
- The hook on the end of the fishing line is directly below the tip of the fishing rod $12\frac{2}{3}$ feet below the surface of the water.

Trent estimates that the distance between the tip of his fishing rod and the hook is less than 65 feet. Is Trent's estimate reasonable? Explain your answer.

Answer

Trent lets his hook drop another 10 inches. What is the distance, in feet, between the tip of the fishing rod and the hook? Do not round your answer.

Show your work.

Answer _____ feet

GO ON

60 The coach for a basketball team wants to buy new shoes for her 12 players.

Super Sports is offering a 20% discount on each pair of shoes, which were originally priced \$72.50. A 6.5% sales tax will be applied to the discounted price.

The same shoes are also available on Double Dribble's web site for \$54.75. A 9% processing fee will be applied to the cost of the shoes, plus a shipping fee of \$5.99 for each pair.

What is the difference in the total costs of the 12 pairs of shoes between the two stores?

Show your work.

Answer \$ _____

GO ON

- 61 Ruby's Market sells smoked meats by the pound. The prices for several different meats are shown in the table.

RUBY'S MARKET PRICES

Type of Meat	Price per pound
Beef	\$4.25
Chicken	\$2.50
Sausage	\$3.25
Turkey	\$2.85

How much more does $1\frac{1}{4}$ pounds of beef cost than $1\frac{1}{4}$ pounds of turkey?

Show your work.

Answer \$_____

Brad has \$10 to spend at Ruby's. He orders $\frac{1}{2}$ pound of sausage and $1\frac{1}{4}$ pounds of chicken. How much money will Brad have left after he pays for this order?

Show your work.

Answer \$_____

STOP