1 Which expression has the least value when $x = 100$?

A $\frac{1}{x}$

B $\frac{10}{x}$

C $1 - x$

D $10 - x$

2 The cafeteria staff made sandwiches. Each sandwich had either rye or white bread, either ham or turkey, and either cheese or no cheese. The staff made an equal number of each type of sandwich. The sandwiches were placed on a tray. Without looking, Mary will choose a sandwich. What are the chances that Mary will get a sandwich with cheese?

A $\frac{1}{8}$

B $\frac{1}{6}$

C $\frac{1}{3}$

D $\frac{1}{2}$

3 A 5-lb bag of apples costs \$4.50, and an 8-lb bag of the same type of apples costs \$7.52. Greg found the unit price, which is the constant of proportionality between cost and weight, for each bag of apples. What is the difference in the unit prices?

A \$0.04 per pound

B \$0.12 per pound

C \$0.16 per pound

D \$0.21 per pound

Go to the next page.

4 The scores that Joni and Sally received on their first seven assignments are shown in this table.

Joni	Sally
70	100
60	50
80	90
90	90
90	70
100	70
80	70

Which statement is true?

A Sally's median score is higher than Joni's median score.

B Sally's median score is lower than Joni's median score.

C Sally's median score is the same as Joni's median score.

D The median scores cannot be determined.

5 Which expression is equivalent to $\frac{1}{2}(2n + 6)$?

A $\frac{1}{2} + 2n + 6$

B $2\frac{1}{2}n + 6\frac{1}{2}$

C $n + 6$

D $n + 3$

6 Susan's weekly earnings were proportional to the number of hours she worked. This table shows the number of hours Susan worked and the amount she earned.

Hours	**Earnings** ($)
5	$47.50
7	$66.50
9	$85.50
11	$104.50

How much money did Susan earn per hour?

A $22.50

B $19.00

C $9.50

D $7.50

7 Which expression is equivalent to $3x - (2x + 4) + 5$?

A $x + 9$

B $x + 1$

C $5x + 9$

D $5x + 1$

Go to the next page.

8 This table shows the relationship between x and y.

x	y
3	163.5
6	327
11	599.5

Which equation models this relationship?

A $y = 53x$

B $y = 53.5x$

C $y = 54x$

D $y = 54.5x$

9 Which expression is equivalent to $2(3 - x) - 12 + 4x$?

A $3x - 6$

B $3x - 7$

C $2x - 6$

D $2x - 7$

10 Mr. Kelly pays $12,564 a year for rent. His rent is a constant amount each month. Which equation represents the amount he pays per month if m = months and c = total rent paid for the year?

A $1{,}047m = c$

B $1{,}047c = m$

C $1{,}047 + m = c$

D $m \div 1{,}047 = c$

Go to the next page.

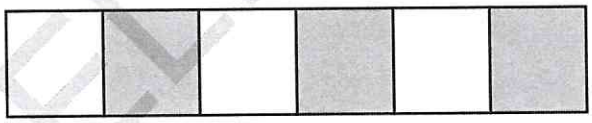
Questions 11 through 15 require you to write your answers in the boxes provided on your answer sheet. A sample grid is shown below each question, but your answer must be properly entered on the answer sheet to be scored. Write only one number or symbol in each box and fill in the circle in each column that matches what you have printed. Fill in only one circle in each column.

11 A library has 12,500 fiction books and 19,000 nonfiction books.

- Currently, $\frac{2}{5}$ of the fiction books are checked out.
- Currently, $\frac{2}{5}$ of the nonfiction books are checked out.
- Of the books checked out, $\frac{1}{10}$ are due back this week.

How many books are due this week?

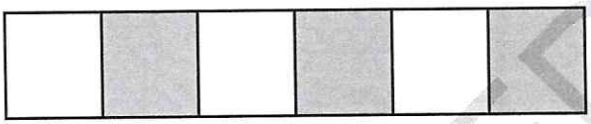
Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



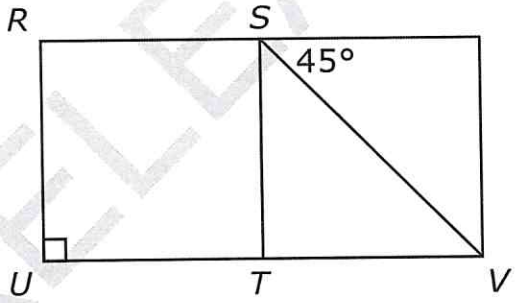
12 Kevin is paid $8.80 per hour. He worked 7 hours. He gave his mother $\frac{1}{4}$ of his earnings. How much did Kevin have left?

(Note: Express the answer as dollars.cents.)

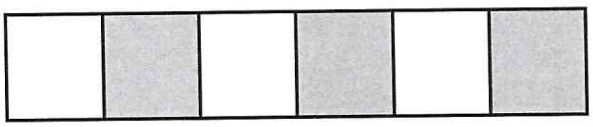
Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



13 Square *RSTU* is inside trapezoid *RSVU*. What is the measure, in degrees, of angle *VSR*?

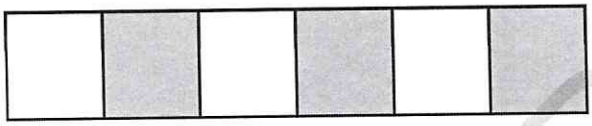


Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



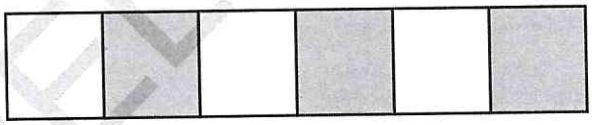
14 Janet can make $\frac{4}{5}$ of a necklace in 20 minutes. At this rate, how many necklaces, to the nearest tenth of a necklace, can Janet make in 1 hour?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



15 Kyle bought *x* pencils. He paid $1.24, including tax, per pencil. He gave the cashier $20 and received $5.12 in change. How many pencils did Kyle purchase?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



Go to the next page.

This is the end of the calculator inactive test questions.

Directions:

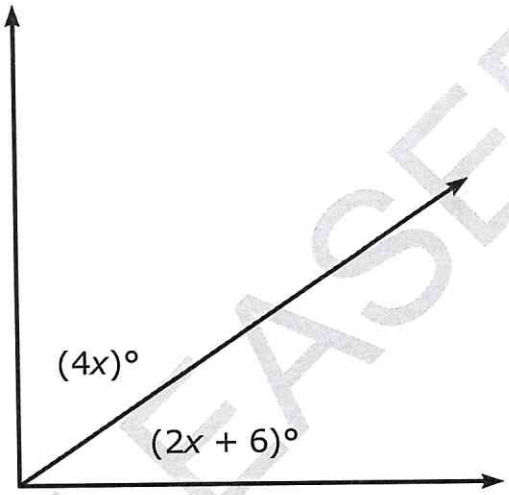
1. **Look back over your answers for the calculator inactive questions. You will not be able to go back and work on these questions once you are given a calculator.**

2. **Raise your hand to let your teacher know you are ready to begin the calculator active test questions.**

3. **Do not begin work on the calculator active test questions until your teacher has given you a calculator.**

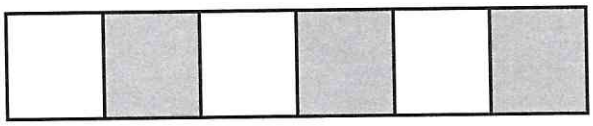
Questions 16 through 20 require you to write your answers in the boxes provided on your answer sheet. A sample grid is shown below each question, but your answer must be properly entered on the answer sheet to be scored. Write only one number or symbol in each box and fill in the circle in each column that matches what you have printed. Fill in only one circle in each column.

16 The angles in this diagram are complementary.



What is the value of x?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



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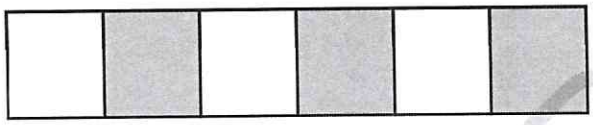
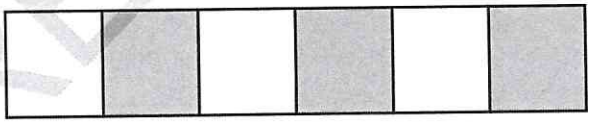
17 A car used $\frac{1}{64}$ of a gallon of gas to drive $\frac{1}{4}$ of a mile. At this rate, how many miles can the car travel using 1 gallon of gas?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



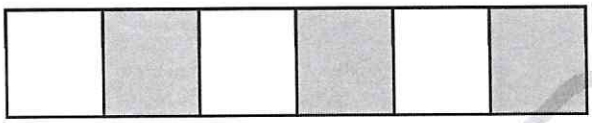
18 Craig earns the same amount of money each month. His telephone bill is $\frac{1}{20}$ of his monthly earnings, and he pays a total of $720 each year for his telephone service. How much does Craig earn each month, in dollars?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.

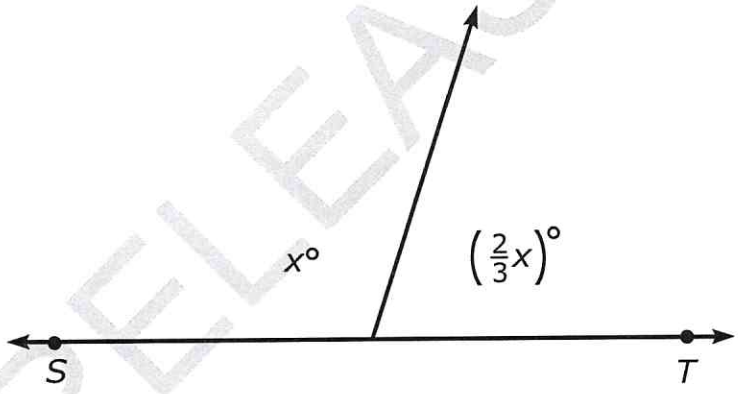


19 A recipe requires $\frac{1}{4}$ cup of oil for every $\frac{2}{3}$ cup of water. How much oil (in cups) is needed per cup of water?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.

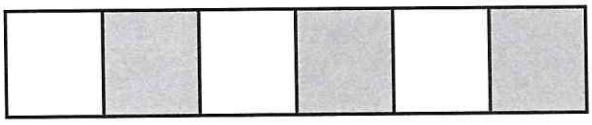


20 In this figure, *ST* is a line.



What is the value of *x*?

Only 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, . , -, and / are allowed in your answer. Answers that are mixed numbers must be entered as an improper fraction or decimal.



21 This table shows how much each type of meat costs at a local deli.

Type of Meat	Price per Pound
ham	$5.99
turkey	$4.99
roast beef	$6.99
salami	$2.99
bologna	$3.99

A customer purchased $\frac{1}{4}$ pound of ham, $1\frac{1}{2}$ pounds of turkey, 1 pound of roast beef, and $\frac{3}{4}$ pound of bologna. ***Approximately*** what will the customer pay for the purchase before sales tax?

A $17

B $19

C $22

D $25

22 Four friends each flipped a coin different numbers of times.

- Alice got heads 75% of the time.
- Mary got heads 8 out of 10 times.
- Sarah got heads 17 out of 20 times.
- Ellen got heads $\frac{3}{5}$ of the time.

Who had the greatest percentage of heads?

A Alice

B Mary

C Sarah

D Ellen

23 Martin ordered a pizza with a 16-inch diameter. Ricky ordered a pizza with a 20-inch diameter. What is the ***approximate*** difference in area of the two pizzas?

A 50 inches^2

B 113 inches^2

C 201 inches^2

D 452 inches^2

Go to the next page.

24 A state representative took several random surveys of adults to find which place they visited most frequently. The average of all of the surveys is shown in this table.

Place	Average of Surveys
zoo	31
museum	14
park	17
aquarium	8

Based on the table, which conclusion can be made?

A On average, 50% of the adults visited the zoo most frequently.

B On average, 17% of the adults visited the park most frequently.

C On average, 2 out of 25 adults visited the aquarium most frequently.

D On average, 2 out of 10 adults visited the museum most frequently.

25 Tony bought a $48 sweatshirt and used a coupon for a 10% discount. Keith bought an identical sweatshirt at a different store for $42.95. Which statement is true?

A Tony paid $0.25 less than Keith paid.

B Tony paid $4.95 less than Keith paid.

C Keith paid $0.25 less than Tony paid.

D Keith paid $4.95 less than Tony paid.