Mathletes Challenge

2026

Round 1 - Test 2

Unleash your problem-solving power!

Question 1

A shopper buys some fruit.

- The shopper buys a pack of strawberries and 2 pounds of peaches.
- A pack of strawberries weighs 1.2 pounds and costs $6.55.
- A pound of peaches costs $3.29.

Which statement explains the shopper's correct thinking to find the total cost of the fruit?

A The shopper thinks that there is 1 pack of strawberries and 1 pound of peaches, and $6.55 + 3.29 = 9.84$.

B The shopper thinks that there is 1 pack of strawberries and 2 pounds of peaches, and $6.55 + 2 \times 3.29 = 13.13$.

C The shopper thinks that there are 1.2 pounds of strawberries and 1 pound of peaches, and $1.2 \times 6.55 + 3.29 = 11.15$.

D The shopper thinks that there are 1.2 pounds of strawberries and 2 pounds of peaches, and $1.2 \times 6.55 + 2 \times 3.29 = 14.44$.

Question 2

A teacher is planning a lesson that includes some activities to be completed at a computer.

- There are 18 students in the classroom.
- The students will be split up in groups of the same size.
- Each group will need to use the computer for $\frac{1}{2}$ hour.

Which additional piece of information is needed to determine how long the computer will need to be in the classroom?

A the number of students in each group

B the number of activities that must be completed at the computer

C the number of times the computer will be available in the classroom

D no more information is needed to find how much time each group will have

Question 3

A student found the value of the expression $10\frac{1}{4} - 6\frac{7}{8}$.

The student subtracted the whole numbers first and then subtracted the lesser fraction from the greater fraction to find the answer.

Which steps correct the error in the student's thinking?

A Step 1: subtract $\frac{2}{8}$ from $\frac{7}{8}$

Step 2: subtract 6 from 10

B Step 1: subtract $\frac{7}{8}$ from $\frac{10}{8}$

Step 2: subtract 6 from 10

C Step 1: regroup the whole number

Step 2: subtract $\frac{2}{8}$ from $\frac{7}{8}$

Step 3: subtract 6 from 9

D Step 1: regroup the whole number

Step 2: subtract $\frac{7}{8}$ from $\frac{10}{8}$

Step 3: subtract 6 from 9

Question 4

$12\frac{1}{2} - 4\frac{7}{10} = ?$

Select one answer.

A $7\frac{6}{8}$

B $7\frac{8}{10}$

C $8\frac{6}{8}$

D $8\frac{8}{10}$

Question 5

The following table shows the corresponding terms in two patterns. Both patterns continue to increase using the same addition rule.

Pattern G	3	7	11	15	19
Pattern H	9	13	17	21	25

What is the relationship between corresponding terms in the two patterns?

Select one answer.

A Each term in pattern H is 3 times the corresponding term in pattern G.

B Each term in pattern H is 6 times the corresponding term in pattern G.

C Each term in pattern H is 4 more than the corresponding term in pattern G.

D Each term in pattern H is 6 more than the corresponding term in pattern G.

Question 6

A package contains $\frac{1}{3}$ pound of deli meat. The meat will be divided evenly among 4 sandwiches.

How much deli meat, in pounds, will be in each sandwich?

A $\frac{1}{12}$

B $\frac{3}{4}$
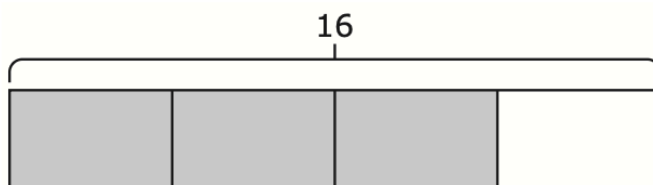
C $\frac{4}{3}$

D $\frac{12}{1}$

Question 7

Which comparison is true?

A $15.347 > 15.374$

B $25.502 < 25.52$

C $35.716 < 35.671$

D $45.280 > 45.28$

Question 8

The given model can be used to show the solution to a word problem. The shaded counters in the model represent the solution to the word problem.
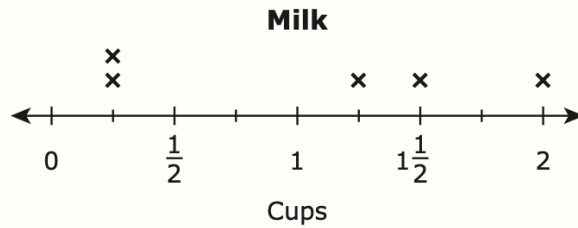

Which word problem can be modeled by the given model?

A Mike had 12 pennies. He gave Jada $\frac{3}{4}$ of the pennies he had. How many pennies did Mike give Jada?

B Each of 16 students in a class drank $\frac{4}{3}$ cup of water. How many cups of water did the students drink in all?

C A group of 16 students went to lunch. Of these students, $\frac{3}{4}$ of them bought milk. How many students bought milk?

D Mike read 12 pages of a book. Jada read $\frac{4}{3}$ times the number of pages Mike read. How many pages did Jada read?

Question 9

The amount of milk needed for each of 5 recipes is shown on the line plot.

Milk

Cups

What is the total amount of milk needed for the recipes?

A 4

B 5

C $5\frac{1}{4}$

D $5\frac{1}{2}$

Question 10

A teacher assigned a project to 5 students. Each student used 3.75 square feet of paper for the project.

What was the total amount of paper used for the project?

Select one answer.

A 1.25 square feet

B 8.75 square feet

C 16.25 square feet

D 18.75 square feet

Question 11

What is the value of $7 \div \frac{1}{5}$?

A $\frac{1}{35}$

B $\frac{5}{7}$

C $\frac{7}{5}$

D $\frac{35}{1}$

Question 12

In which number does the digit 8 have a value that is 10 times as great as the value of the digit 8 in the number 456.789?

A 567.894

B 678.945

C 789.456

D 894.567

Question 13

Which set of statements is true?

Select one answer.

A All rectangles are quadrilaterals.
All quadrilaterals have 4 sides.
Thus, all rectangles have 4 sides.

B All trapezoids are squares.
All squares have sides of equal length.
Thus, all trapezoids have sides of equal length.

C All rectangles are trapezoids.
All trapezoids have 4 right angles.
Thus, all rectangles have 4 right angles.

D All squares are quadrilaterals.
All quadrilaterals have acute angles.
Thus, all squares have acute angles.

Question 14

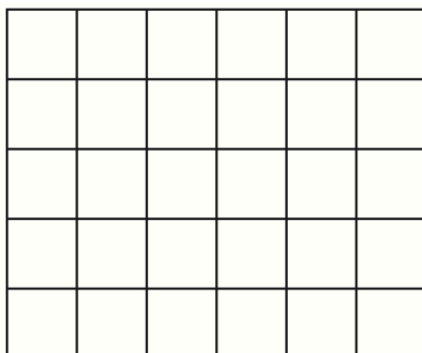A contractor measured the length and the width of two rectangular pieces of land.

- The two pieces of land are adjacent and share the same width of 17 yards.

- The first piece of land has a length of $32\frac{1}{3}$ yards.

- The second piece of land has a length of $25\frac{1}{4}$ yards.

Which steps should the contractor use to determine the area, in square yards, of the two pieces of land altogether?

A Add $32\frac{1}{3}$ and $25\frac{1}{4}$ and then add the result by 17.

B Multiply $32\frac{1}{3}$ and $25\frac{1}{4}$ and then add the result by 17.

C Add $32\frac{1}{3}$ and $25\frac{1}{4}$ and then multiply the result by 17.

D Multiply $32\frac{1}{3}$ and $25\frac{1}{4}$ and then multiply the result by 17.
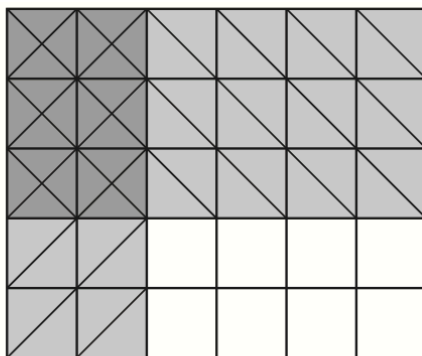
Question 15

An artist is using a squared wooden panel to create a piece of art. The panel is divided in smaller squares as shown.

The artist paints $\frac{3}{5}$ of the squares in red, then draws golden circles on $\frac{1}{3}$ of the painted squares to decorate it.

The artist draws the model shown to represent the fraction of the whole wooden panel that is both painted and decorated.

Which statement is true about the model the artist drew?

A The model is correct because it represents the equation $\frac{3}{5} + \frac{2}{6} = \frac{6}{30}$.

B The model is correct because it represents the equation $\frac{3}{5} \times \frac{1}{3} = \frac{1}{5}$ and $\frac{1}{5}$ of 30 is 6.

C The model is incorrect because 2 of the 6 columns are shaded and there should be 3 columns with 1 column shaded.

D The model is incorrect because $\frac{3}{5} \times \frac{1}{3} = \frac{1}{5}$ and $\frac{1}{5}$ of the model can only be represented by shading 1 row of squares.

Question 16

What is the value of $63,798 \div 49$?

A 132

B 1,302

C 1,320

D 1,506

Question 17

All of the numbers that do not exceed 15 will be graphed on a number line.

Which statement best describes the graph of the numbers?

Select one answer.

A The graph will be a ray that starts at 14 and points to the left. The graph will include the endpoint of the ray.

B The graph will be a ray that starts at 15 and points to the left. The graph will include the endpoint of the ray.

C The graph will be a ray that starts at 15 and points to the right. The graph will not include the endpoint of the ray.

D The graph will be a ray that starts at 16 and points to the left. The graph will not include the endpoint of the ray.

Question 18

Melvin and Roberto played football on two different teams last season.

- Melvin's team won *w* games.
- Roberto's team won 3 fewer games than Melvin's team.

Which expression can be used to represent the number of games Roberto's team won last season?

Select one answer.

A $w + 3$

B $w - 3$

C $w \cdot 3$

D $w \div 3$

Question 19

An expression is shown.

$$56 + 91$$

Which expression is equivalent to the given expression **and** is written using the **greatest** common factor of the two numbers in the expression?

A $1(56 + 91)$

B $3(14 + 27)$

C $7(8 + 13)$

D $13(4 + 7)$

Question 20

An artist is creating several pieces of pottery.

- He has $10\frac{4}{5}$ pounds of clay.

- He will use $\frac{7}{10}$ of a pound to create each piece of pottery.

What is the **greatest** number of pieces of pottery the artist can make with this clay?

A The artist can create 3 pieces of pottery.

B The artist can create 5 pieces of pottery.

C The artist can create 12 pieces of pottery.

D The artist can create 15 pieces of pottery.

END

OF

TEST

ANSWER KEY - 2026 ROUND 1 - TEST 2

1. B	11. D
2. A	12. A
3. D	13. A
4. B	14. C
5. D	15. B
6. A	16. B
7. B	17. B
8. C	18. B
9. C	19. C
10. D	20. D