

TEST NAME: Fall SOY Checkpoint Grade 5 Math Content
TEST ID: 38
GRADE: 05 - 06
SUBJECT: Mathematics
TEST CATEGORY: Start of Year Checkpoint

08/10/20, Fall SOY Checkpoint Grade 5 Math Content

Student: _____

Class: _____

Date: _____

Instructions

The Grade 5 Math test has two subparts. Each subpart contains different types of questions. To begin the test, click the "Next" arrow button at the top.

Read the passage - 'VH987089_directions' - and answer the question below:

VH987089_directions

Subpart 1 of this test contains different types of assessment questions in Grade 5 Math. You may make notes on scratch paper or use the Notepad tool within the online test. Make sure you answer all the questions. You **MAY NOT** use a calculator in Subpart 1 of this test.



1. What is the value of this expression?

$$(5 + 3) \times (4 - 2)$$

- A. 11
 - B. 15
 - C. 16
 - D. 30
-

2. What is $12\frac{4}{9} + 14\frac{5}{12}$?

- A. $26\frac{1}{4}$
- B. $26\frac{3}{7}$
- C. $26\frac{7}{12}$
- D. $26\frac{31}{36}$

3. Susan plans to make 4 pies for a family reunion. There will be 32 people at the reunion. How much pie will each person get if each piece is the same size?

- A. $\frac{1}{4}$ of a pie
- B. $\frac{1}{7}$ of a pie
- C. $\frac{1}{8}$ of a pie
- D. $\frac{1}{32}$ of a pie

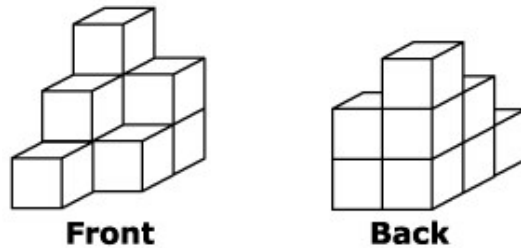
4. Which division problems have a quotient greater than 25?

Select **all** that apply.

Pick up to 5 answers.

- A. $\frac{1250}{50}$
- B. $\frac{1310}{50}$
- C. $\frac{1175}{50}$
- D. $\frac{650}{25}$
- E. $\frac{675}{25}$

5. This figure is made of unit cubes. It is shown from the front and from the back.



What is the volume, in cubic units, of the figure?

- A. 6
- B. 9
- C. 11
- D. 14

6. A recipe for chocolate chip cookies calls for $\frac{3}{4}$ cup of flour and $\frac{1}{3}$ cup of sugar.

How much flour and sugar combined is used in the recipe?

- A. $\frac{4}{7}$ cup
- B. $1\frac{1}{12}$ cup
- C. $\frac{1}{4}$ cup
- D. $\frac{5}{12}$ cup

7. What is $\frac{3}{5} + \frac{1}{6}$?

- A. $\frac{4}{11}$
- B. $\frac{2}{15}$
- C. $\frac{13}{30}$
- D. $\frac{23}{30}$

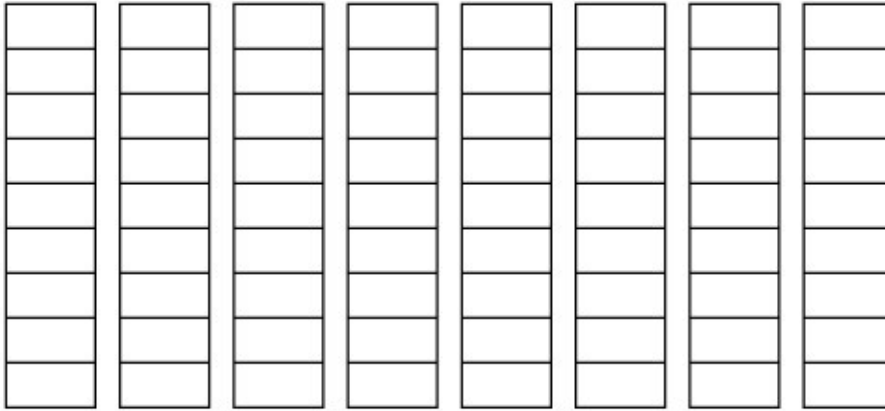
8. Which values are greater than or equal to $3876 \div 68$?

Select **all** that apply.

Pick up to 5 answers.

- A. 55
- B. 56
- C. 57
- D. 58
- E. 59

9. This model can be used to find $8 \div \frac{1}{9}$.



Which statement about $8 \div \frac{1}{9}$ is true?

- A. $8 \div \frac{1}{9} = \frac{8}{9}$, because $\frac{8}{9} \times \frac{1}{9} = 8$.
- B. $8 \div \frac{1}{9} = \frac{8}{9}$, because $\frac{8}{9} \times 9 = 8$.
- C. $8 \div \frac{1}{9} = 72$, because $\frac{1}{9} \times 72 = 8$.
- D. $8 \div \frac{1}{9} = 72$, because $\frac{1}{9} \times 8 = 72$.
10. What is $4,586 \times 908$?
- A. 439,428
- B. 449,428
- C. 4,064,088
- D. 4,164,088
11. What is $728 \div 52$?
- A. 4
- B. 11
- C. 14
- D. 15

12. What is 1850×135 ?

- A. 199,800
- B. 239,750
- C. 248,550
- D. 249,750

13. What is the solution to $4\frac{9}{10} + 5\frac{2}{3}$?

- A. $9\frac{4}{5}$
- B. $9\frac{11}{13}$
- C. $10\frac{7}{30}$
- D. $10\frac{17}{30}$

14. The Carson family went fishing. They caught a $2\frac{5}{8}$ pound trout and a $1\frac{1}{2}$ pound bass.

Which calculation shows how many more pounds the trout weighed than the bass?

- A. $2\frac{5}{8} - 1\frac{1}{2} = 1\frac{1}{8}$
- B. $2\frac{5}{8} - 1\frac{1}{2} = 1\frac{4}{6}$
- C. $2\frac{5}{8} + 1\frac{1}{2} = 3\frac{6}{10}$
- D. $2\frac{5}{8} + 1\frac{1}{2} = 4\frac{1}{8}$

15. A crate measures 6 feet by 5 feet by 3 feet. What is the volume of the crate in cubic feet?

- A. 14
- B. 17
- C. 87
- D. 90

Read the passage - 'VH987074_directions' - and answer the question below:

VH987074_directions

Subpart 2 of this test contains different types of assessment questions in Grade 5 Math. You may make notes on scratch paper or use the Notepad tool within the online test. Make sure you answer all the questions. You MAY use a calculator in Subpart 2 of this test.



16. An art teacher has $\frac{1}{5}$ of an ounce of glitter. She divides the glitter equally between 10 students.

How much glitter does each student get?

- A. $\frac{1}{50}$ ounce
- B. $\frac{1}{15}$ ounce
- C. $\frac{1}{10}$ ounce
- D. $\frac{1}{2}$ ounce

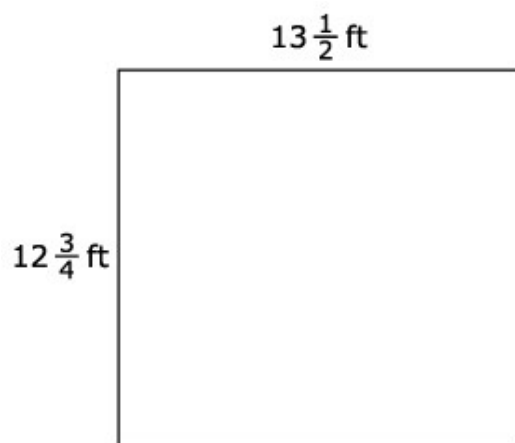
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17. The first layer of a rectangular prism can be packed with 20 unit cubes, without gaps or overlaps. The prism is 6 unit cubes tall.

Select **all** expressions that represent the volume of the prism.

Pick up to 5 answers.

- A. $20 + 6$
- B. 20×6
- C. $20 \times 6 \times 6$
- D. $20 \times 20 \times 6$
- E. $20 + 20 + 20 + 20 + 20 + 20$

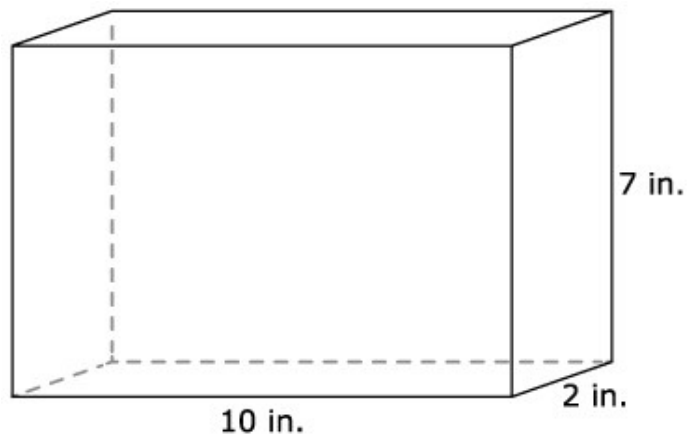
18. The lengths of the sides of a room are shown.



What is the area of the room?

- A. $26\frac{1}{4}$ ft²
- B. $52\frac{1}{2}$ ft²
- C. $156\frac{3}{8}$ ft²
- D. $172\frac{1}{8}$ ft²

19. A rectangular prism is shown. The prism will be completely packed with unit cubes.



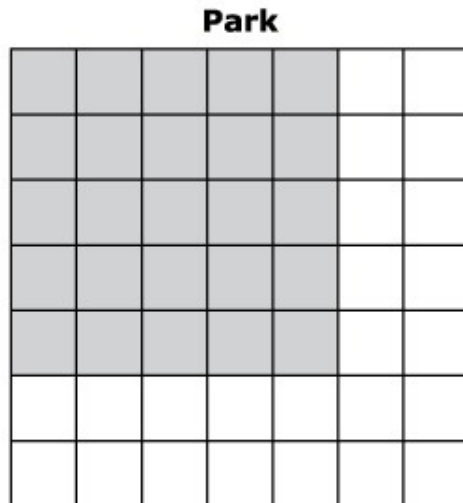
Which expressions represent the number of unit cubes that will completely pack the prism?

Select the **three** correct answers.

Pick up to 6 answers.

- A. $7 \times (2 \times 10)$
- B. $(7 \times 2) \times 10$
- C. $7 \times (2 + 10)$
- D. $(10 \times 7) \times 2$
- E. $(7 \times 2) + (7 \times 10)$
- F. $(7 \times 2) \times (7 \times 10)$

20. A park is $\frac{1}{7}$ mile by $\frac{1}{7}$ mile square, as shown in the tiling model. The shaded part of the tiling model shows the fractional part of the park that has picnic tables.



Which equation can be used to find the area, in square miles, of the part of the park that has picnic tables?

- A. $\frac{5}{7} \times \frac{5}{7} = ?$
- B. $\frac{5}{7} + \frac{5}{7} = ?$
- C. $\frac{25}{49} \times \frac{25}{49} = ?$
- D. $\frac{25}{49} + \frac{25}{49} = ?$
21. Which expression correctly shows sixteen minus two, divided by the sum of three and four?
- A. $(16 + 2 \div 3) + 4$
- B. $(16 \div 2) - (3 + 4)$
- C. $(16 \times 2) \div (3 + 4)$
- D. $(16 - 2) \div (3 + 4)$

22. A soup company makes a container in the shape of a rectangular prism with a length of 3 inches, a width of 4 inches, and a height of 6 inches.

What is the volume of the soup container?

- A. 72 in^3
- B. 24 in^3
- C. 13 in^3
- D. 12 in^3

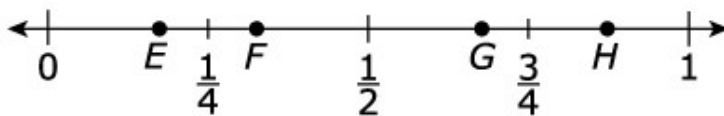
23. Olivia is making lunch.

- She uses $1\frac{3}{8}$ pounds of carrots in soup.
- She uses $\frac{4}{5}$ pound of carrots in a salad.

About how many pounds of carrots did Olivia use in all?

- A. between 1 and $1\frac{1}{2}$ pounds
- B. between $1\frac{1}{2}$ and 2 pounds
- C. between 2 and $2\frac{1}{2}$ pounds
- D. between $2\frac{1}{2}$ and 3 pounds

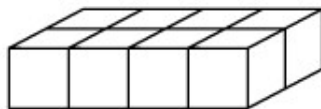
24. Nigel starts working on his math homework. He does $\frac{1}{6}$ of the homework in the first 10 minutes. Then he does $\frac{1}{5}$ of the homework in the next 10 minutes. The number line shows points $E, F, G,$ and H . They represent different fractional parts of one whole.



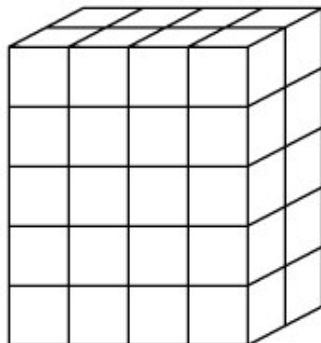
Which point on the number line is closest to the fractional part of Nigel's homework that he does in the first 20 minutes?

- A. point E
- B. point F
- C. point G
- D. point H

25. Amelia makes a figure out of unit cubes. The first layer of cubes she uses is shown.



Then Amelia adds more layers of cubes. The final figure is shown.



What is the volume, in cubic units, of Amelia's final figure?

- A. 13
- B. 28
- C. 32
- D. 40