

**EM4 Grade 5 Unit 5: Unit Assessment**  
**(Version 2- English)**

Student Name: \_\_\_\_\_

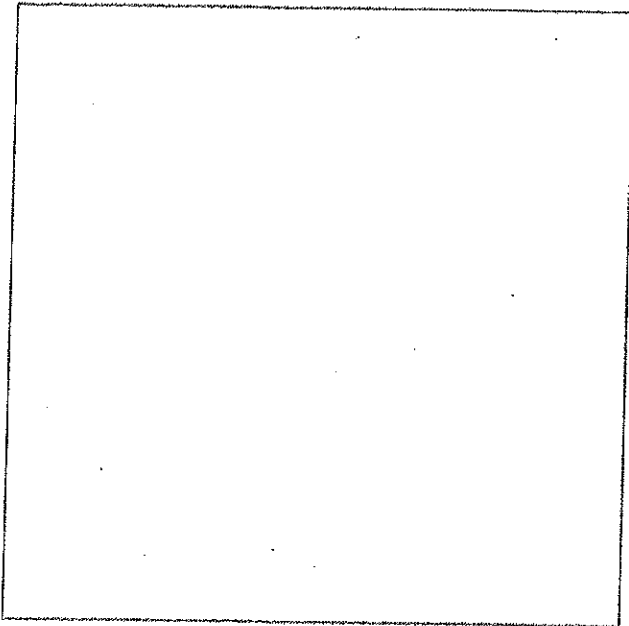
Student ID: \_\_\_\_\_

Date: \_\_\_\_\_

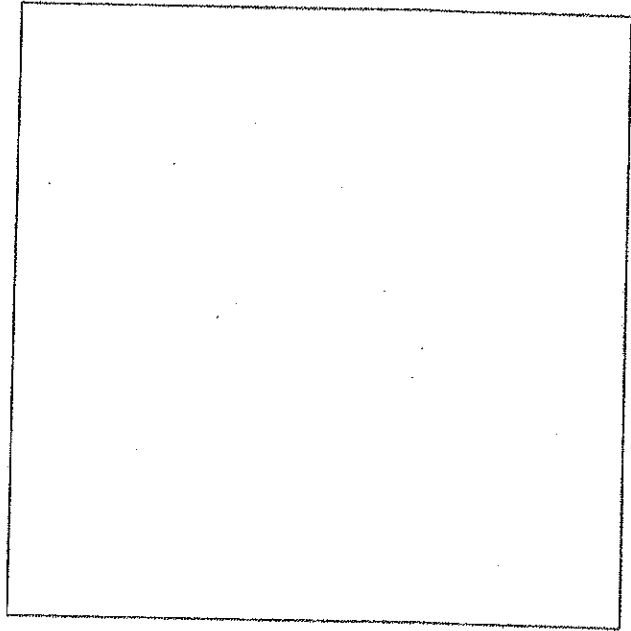
- 1 Find a common denominator for the pairs of fractions given.  
Rewrite the fractions as equivalent fractions with a common denominator.

a.  $\frac{4}{5}$  and  $\frac{7}{15}$

b.  $\frac{2}{3}$  and  $\frac{3}{4}$



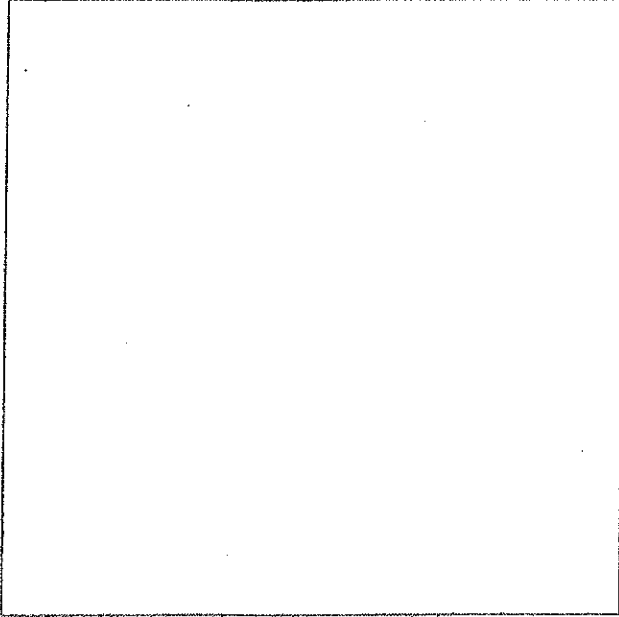
- 2 Describe the strategy you used to find a common denominator for  $\frac{2}{3}$  and  $\frac{3}{4}$ .



3 Use equivalent fractions to solve.

a.  $\frac{4}{5} - \frac{7}{15} = \underline{\hspace{2cm}}$

b.  $\frac{2}{3} + \frac{3}{4} = \underline{\hspace{2cm}}$



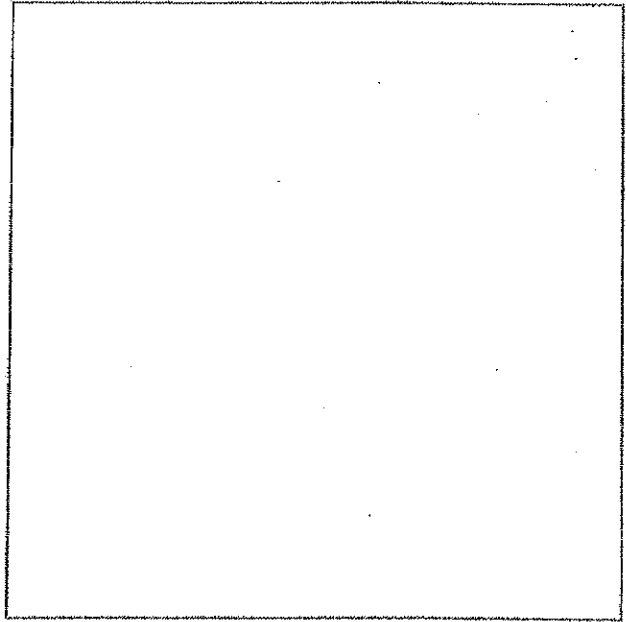
4 Use paper and pencil to solve the problem.

Estimate. Then solve. Show your work.  
Use your estimate to check whether your answer makes sense.

$$6\frac{4}{9} + 4\frac{2}{3} = ?$$

Estimate:

Answer:



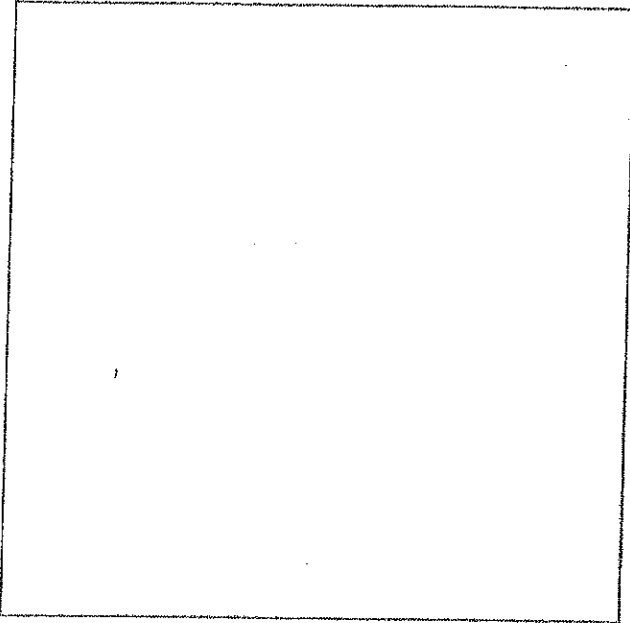
- 5 Use paper and pencil to solve the problem.

Estimate. Then solve. Show your work.  
Use your estimate to check whether your answer makes sense.

$$8\frac{6}{9} - 2\frac{2}{12} = ?$$

Estimate:

Answer:

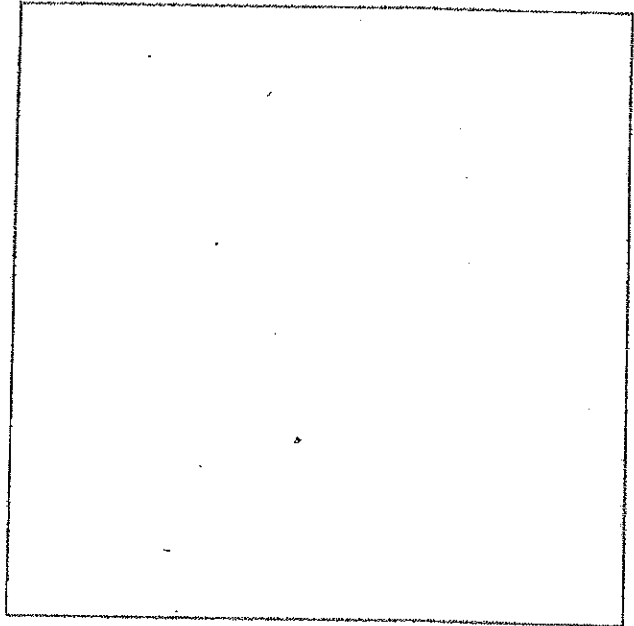


- 6 Jeff walked  $3\frac{3}{5}$  miles on Wednesday and  $2\frac{4}{5}$  miles on Thursday.  
How many miles did he walk on Wednesday and Thursday all together?

Number model:

Estimate:

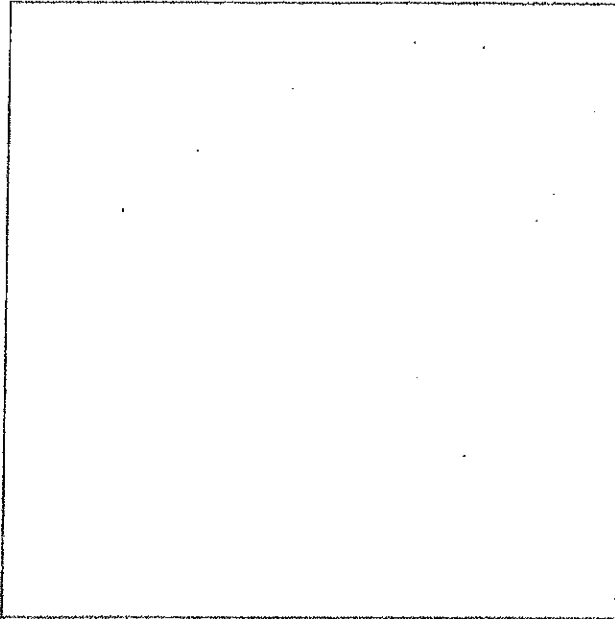
Jeff walked \_\_\_\_\_ miles.



7 a. What is  $\frac{2}{8}$  of 32?

b. What is  $\frac{5}{8}$  of 32?

c. Explain how you can use your answer to Part a to help you solve Part b.



8 Solve.

$$15 * \frac{2}{3} = \underline{\quad}$$

9 Solve.

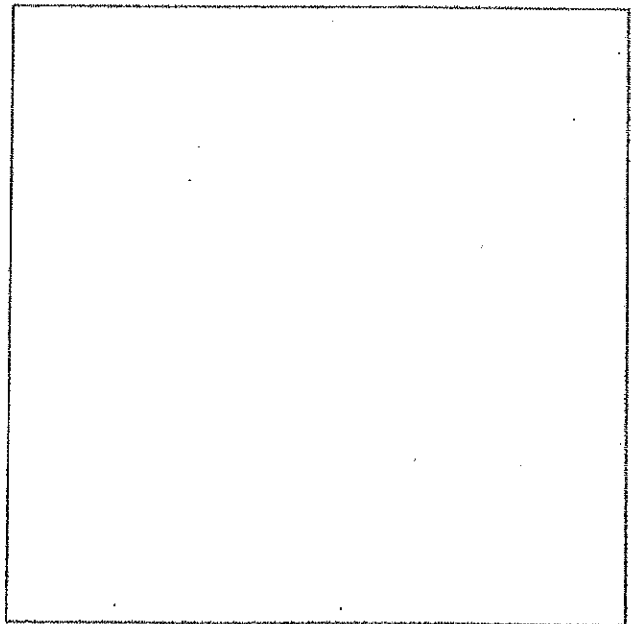
$$36 * \frac{2}{9} = \underline{\quad}$$

10 Look at the problem  $27 * \frac{5}{9}$ .

a. Will the product be greater than 27?  
How do you know?

b. Will the product be greater than  $\frac{5}{9}$ ?  
How do you know?

c. Solve.  $27 * \frac{5}{9} = \underline{\quad}$

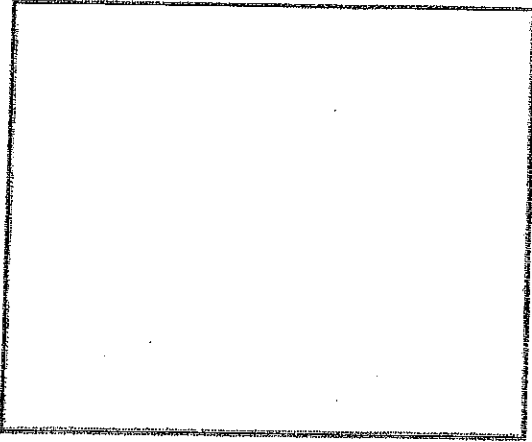


- 11 Use paper and pencil to solve the problem.

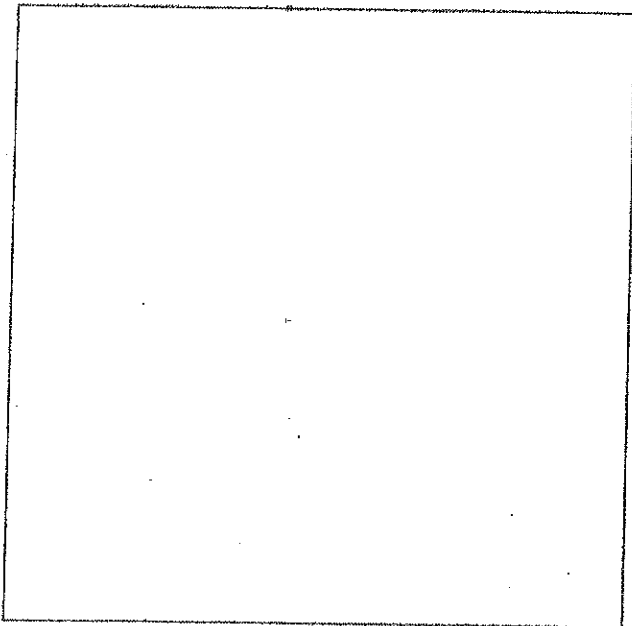
Fold a piece of paper to help you solve the problem

$\frac{1}{3}$  of  $\frac{1}{2}$ .

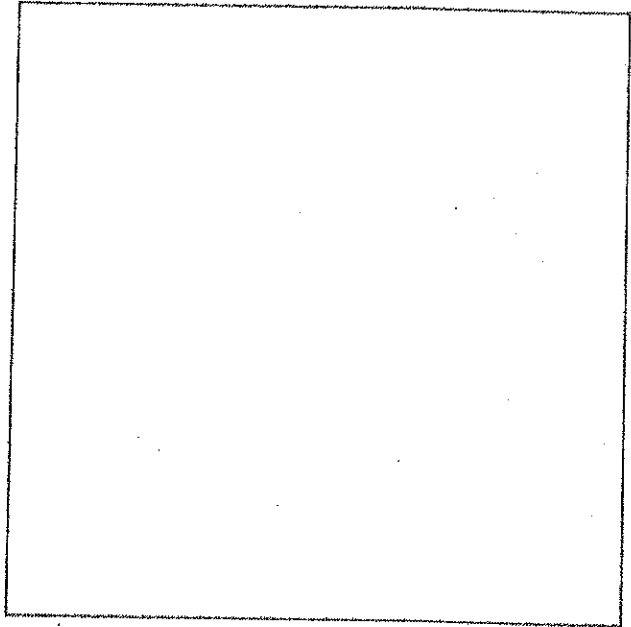
Then draw lines and shade the rectangle below to show what you did.



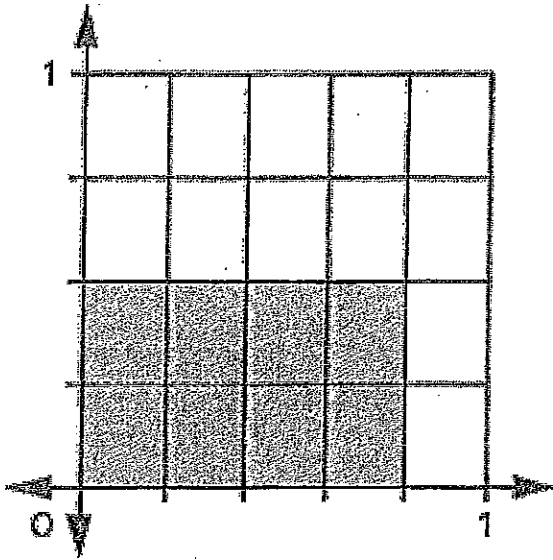
$\frac{1}{3}$  of  $\frac{1}{2}$  is \_\_\_\_\_.



- 12 Write a number story that matches the expression  $\frac{4}{5}$  \* 25. Then solve the number story.



- 13 a. What are the dimensions of the shaded rectangle in the area model below?



\_\_\_ units by \_\_\_ units

- b. What is the area of the shaded rectangle?

\_\_\_ square units

- c. Write a multiplication number sentence that matches the area model.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- 14 Use the fraction multiplication algorithm to solve.

$$\frac{13}{7} * \frac{2}{5} = \underline{\hspace{2cm}}$$

- 15 Use the fraction multiplication algorithm to solve.

$$\frac{12}{8} * \frac{4}{5} = \underline{\hspace{2cm}}$$

- 16 Use paper and pencil to solve the problem.

Write a division number model with a letter for the unknown. Then draw a picture to solve the problem. Write a multiplication number sentence to show how you checked your answer.

Carlotta has  $\frac{8}{4}$  gallon of paint. She wants to pour it into 8 smaller containers, putting the same amount in each container. How much paint should she put in each container?

Division number model:

Carlotta should pour \_\_\_\_\_ gallon of paint into each container.

Check:

- 17 Use paper and pencil to solve the problem.

Write a division number model with a letter for the unknown. Then draw a picture to solve the problem. Write a multiplication number sentence to show how you checked your answer.

Danielle is running a 2-mile race around a track. If each lap around the track is  $\frac{1}{4}$  mile long, how many laps will she run?

Division number model:

Danielle will run \_\_\_\_\_ laps.

Check:

