

ERROR ANALYSIS TASKS

Name: TREVOR PAYTAS

Date: Jan 16

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

A recipe that Vanessa is making requires $\frac{3}{4}$ of a cup of milk. This is $\frac{1}{4}$ of a cup more milk than she has. How much milk does Vanessa have?

Vanessa has 1 cup of milk.

What did the student do wrong? Why do you think the student made this error?

The student added because the problem said "more". However, the problem was saying that what she needed was more than what she had, which means she had less than that. The student should have subtracted.

Solve the problem correctly. Show all of your work.

$$\frac{3}{4} - \frac{1}{4} = \frac{2}{4} \rightarrow \frac{1}{2}$$

Vanessa has $\frac{1}{2}$ cup of milk.

(3RD - 5TH GRADE)

About this Freebie

This freebie includes 9 Math Error Analysis Tasks (3 specific to 3rd grade math standards, 3 specific to 4th grade math standards and 3 specific to 5th grade standards). If you are interested in more standards based error analysis tasks, click on the links below.

ERROR ANALYSIS
math tasks

FOR 5th GRADE COMMON CORE MATH

72
tasks!

CREATED BY:
Jennifer Findley

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correct the equation.

Draw models to represent and help you solve the equation: $0.42 + 0.6 =$

The answer is 0.98 because there are 100 hundredths shaded in both models.

Who did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

ERROR ANALYSIS
math tasks

FOR 4th GRADE COMMON CORE MATH

78
tasks!

CREATED BY:
Jennifer Findley

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correct the question.

Leonardo had \$5. He spent \$4.49 at the school store. How much money did Leonardo have remaining after his purchase?

Leonardo had this left after his purchase:

$$\begin{array}{r} 4.68 \\ - 4.49 \\ \hline 0.19 \end{array}$$

Who did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

ERROR ANALYSIS
math tasks

for 3rd grade common core math

81
tasks!

Jennifer Findley

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error and correctly answer the question.

Solve: $682 + 294 =$

The answer is 876. First, I added 600 and 200 and got 800. Then I added 80 and 90 and got 70. Finally, I added 2 and 4 and got 6.

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

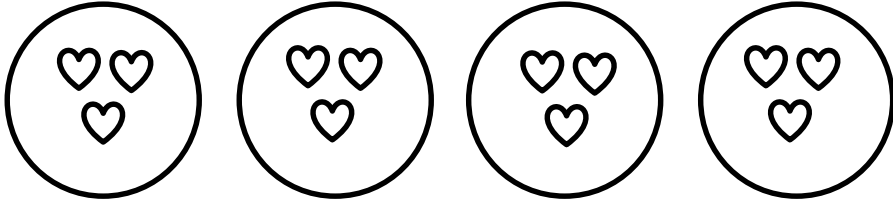
3rd Grade

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Draw a model and write a multiplication equation that matches this situation: 3 groups of 4 objects

$4 \times 3 =$ 

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly.
Show all of your work.

Find the Error

Name: _____ **Answer Key** _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Draw a model and write a multiplication equation that matches this situation: 3 groups of 4 objects

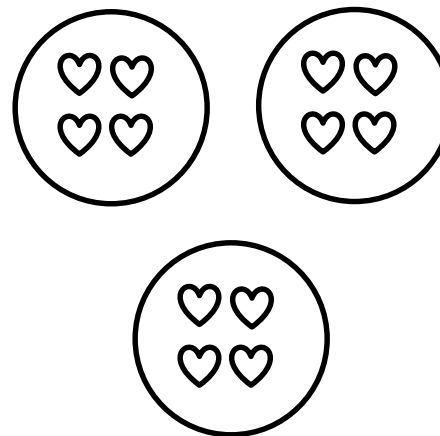
$4 \times 3 =$

What did the student do wrong? Why do you think the student made this error?

The student incorrectly modeled the equation as 4 groups of 3 instead of 3 groups of 4.

Solve the problem correctly.
Show all of your work.

$3 \times 4 =$



Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Solve. $682 + 294 =$

The answer is 876. First, I added 600 and 200 and got 800. Then, I added 80 and 90 and got 70. Finally, I added 2 and 4 and got 8.

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly.
Explain your thinking.

Find the Error

Name: _____ **Answer Key** _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Solve. $682 + 294 =$

The answer is 876. First, I added 600 and 200 and got 800. Then, I added 80 and 90 and got 70. Finally, I added 2 and 4 and got 8.

What did the student do wrong? Why do you think the student made this error?

The student did not correctly add the tens place. He or she added 80 and 90 as 70 instead of 170.

Solve the problem correctly. Explain your thinking.

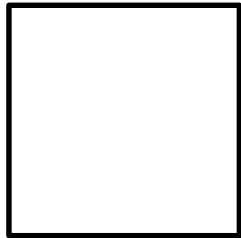
The answer is 976.

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Find the perimeter of the square.



10 inches

The perimeter of the square is 100 inches.

What did the student do wrong? Why do you think the student made this error?

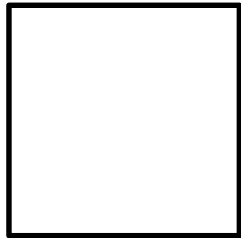
Solve the problem correctly.
Explain your thinking.

Find the Error

Name: _____ **Answer Key** Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Find the perimeter of the square.



10 inches

The perimeter of the square is 100 inches.

What did the student do wrong? Why do you think the student made this error?

The student found the area of the square, or the student multiplied the length and the width instead of adding all of the sides.

Solve the problem correctly. Explain your thinking.

The perimeter of the square is 40 inches.

4th Grade

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Stephen read 12 pages of his assigned reading last night. His friend, Sarai, read 4 more pages than Stephen did. How much did Sarai read?

Sarai read 48 pages of her assigned reading.

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Show all of your work.

Find the Error

Name: _____ *Answer Key* _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly answer the question.

Stephen read 12 pages of his assigned reading last night. His friend, Sarai, read 4 more pages than Stephen did. How much did Sarai read?

Sarai read 48 pages of her assigned reading.

What did the student do wrong? Why do you think the student made this error?

The student multiplied instead of adding. This problem is an additive comparison, not a multiplicative comparison problem.

Solve the problem correctly. Show all of your work.

$$12 + 4 = 16$$

Sarai read 16 pages of her assigned reading because 16 is 4 more than 12.

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

$$\begin{array}{r} 165 \text{ R}11 \\ 9 \overline{) 1,496} \\ \underline{- 900} \\ 596 \\ \underline{- 585} \\ 011 \end{array}$$

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

Find the Error

Name: _____ *Answer Key* _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

$$\begin{array}{r}
 165 \text{ R}11 \\
 9 \overline{) 1,496} \\
 \underline{- 900} \\
 596 \\
 \underline{- 585} \\
 011
 \end{array}$$

What did the student do wrong? Why do you think the student made this error?

The student needed to continue dividing because the remainder is larger than the divisor.

Solve the problem correctly. Explain your thinking.

166 R2

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Solve.

$$\frac{4}{6} + \frac{1}{6} = \frac{5}{12}$$

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Show all of your work.

Find the Error

Name: _____ *Answer Key* _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Solve.

$$\frac{4}{6} + \frac{1}{6} = \frac{5}{12}$$

What did the student do wrong? Why do you think the student made this error?

The student added the denominators together in addition to adding the numerators.

Solve the problem correctly. Show all of your work.

$\frac{5}{6}$

5th Grade

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Solve. $24 \div 6 \times 2 =$

∨

$$24 \div 12 = 2$$

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Show all of your work.

Find the Error

Name: Answer Key Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

$$\begin{array}{l} \text{Solve. } 24 \div 6 \times 2 = \\ \quad \quad \quad \downarrow \\ 24 \div 12 = 2 \end{array}$$

What did the student do wrong? Why do you think the student made this error?

The student did not follow the order of operations by going left to right when multiplication and division are both in an equation.

Solve the problem correctly. Show all of your work.

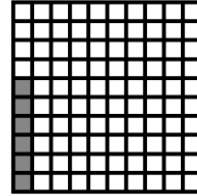
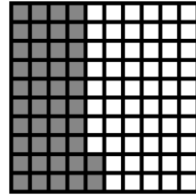
8

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

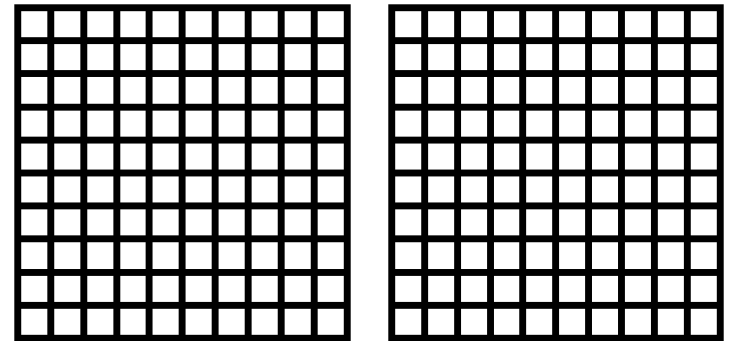
Draw models to represent and help you solve the equation: $0.42 + 0.6 =$



The answer is 0.48 because there are 48 hundredths shaded in both models.

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

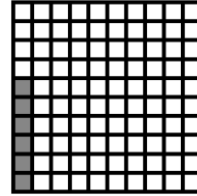
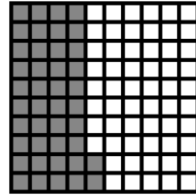


Find the Error

Name: Answer Key Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Draw models to represent and help you solve the equation: $0.42 + 0.6 =$

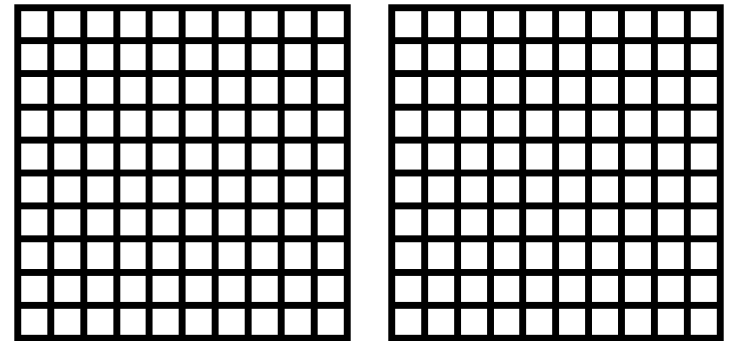


The answer is 0.48 because there are 48 hundredths shaded in both models.

What did the student do wrong? Why do you think the student made this error?

The student incorrectly represented 0.6 as 0.06, changing the problem.

Solve the problem correctly. Explain your thinking.



0.66

Find the Error

Name: _____ Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Solve.

$$\frac{3}{4} + \frac{4}{4} + \frac{6}{8} = \frac{7}{8} + \frac{6}{8} = \frac{13}{8} = 1\frac{5}{8}$$

What did the student do wrong? Why do you think the student made this error?

Solve the problem correctly. Explain your thinking.

Find the Error

Name: Answer Key Date: _____

Directions: Analyze the student's work and answer shown below. Identify the error. Then correctly solve the equation.

Solve.

$$\frac{3}{4} + \frac{4}{4} + \frac{6}{8} = \frac{7}{8} + \frac{6}{8} = \frac{13}{8} = 1\frac{5}{8}$$

What did the student do wrong? Why do you think the student made this error?

When changing $\frac{3}{4}$ to an equivalent fraction with a denominator of 8, the student incorrectly added four instead of multiplying.

Solve the problem correctly. Explain your thinking.

$1\frac{4}{8}$ or $1\frac{1}{2}$

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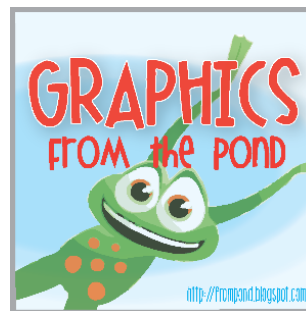


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Jennifer Findley

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