Quiz 2A, MTH 2010 - No Calculators

Dr. Graham-Squire, Spring 2017

Name: _____

1. (2 points) Calculate the following:

   (a) $3 + (-5)$

   (b) $15 - (-8)$

   (c) $-9 + (-3)$

   (d) $-7 - (-9)$

2. (3 points) A student has the following work for the subtraction problem $736 - 572$:

$$
\begin{array}{cccc}
 & & 13 & \\
 & 7 & \not{3} & 6 \\
- & {}_{6}\not{5} & 7 & 2 \\
\hline
 & 1 & 6 & 4 \\
\end{array}
$$

   Is the student's answer correct? If not, what is the correct calculation? If the answer is correct, how is the student's method of calculation different from the standard method of subtraction? Will their method always work, or did the student just get lucky on this problem?

3. (3 points) Jack pours $\frac{3}{4}$ gallon of paint from a paint can into an empty bucket, and then pours $\frac{1}{5}$ of the paint in the bucket back into the can. How much paint is left in the bucket?

Which of the following answers gives an appropriate calculation for how to find the answer? Show/explain your reasoning!

(A) $\dfrac{3}{4} - \dfrac{1}{5}$

(B) $\dfrac{3}{4} \times \dfrac{1}{5}$

(C) $1 - \left(\dfrac{1}{5} \times \dfrac{3}{4} \right)$

(D) There is not enough information in the problem to calculate how much paint is left in the bucket. (If you choose this answer, you should explain below why there is not enough information)

(E) The answer cannot be calculated by any of the expressions above, but CAN be calculated by some other expression. (If you choose this answer, you should say below what that other calculation is)

4. (2 points) A student did the work below to answer the word problem: "Cole has a collection of Pokemon cards. He gave 26 Pokemon cards to his friend Camden. Now he has 43 Pokemon cards. How many remain in his collection?"

$$
\begin{array}{c c}
{}^{3}\ \ {}^{13} \\
\not{4}\ \ \not{3} \\
-\quad 2\ \ \ 6 \\
\hline
1\ \ \ 7
\end{array}
$$

Does the student have the correct solution to the problem? Explain why or why not.