

Quiz 2A, MTH 2010 - No Calculators

Dr. Graham-Squire, Spring 2015

Name: _____

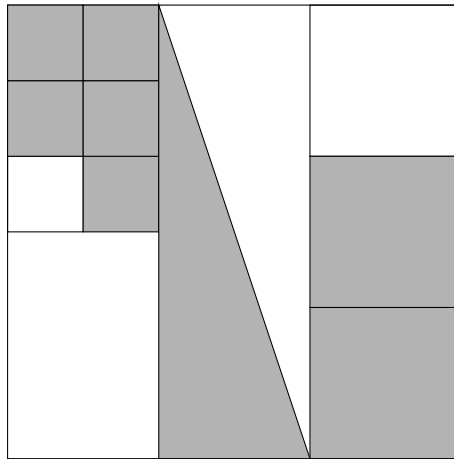
1. (2 points) Calculate $-3 - (-8)$. Explain why your answer makes sense by using a number line or “real-world” reasoning—it is not enough to just give a straight mathematical calculation.

2. (2 points) Ben woke up at 6:54 AM, and played video games until 9:03 AM. To calculate how long he played, he did the following calculation:

$$\begin{array}{r} 9 \\ 8 \cancel{1} 3 \\ \cancel{0} : \cancel{0} \cancel{3} \\ - 6 : 5 4 \\ \hline 2 : 4 9 \end{array}$$

Is his answer correct? If not, what was his mistake?

3. (4 points) What fraction of the square is shaded? Show your work to get full/partial credit!



- (A) $\frac{3}{7}$
- (B) $\frac{17}{36}$
- (C) $\frac{19}{36}$
- (D) $\frac{11}{9}$
- (E) $\frac{2}{3}$
4. (2 points) Eva wants to create a secret password so that only people she trusts will be allowed into her awesome pony-princess-mermaid-fairy club. She wants the code to have three total entries: it must start with a letter of the alphabet, and then be followed by two numbers (zero through 9), which can't be the same number. How many different secret passwords are possible? Explain your reasoning.