

# Math 90 Quiz 6

Fall, 2008 -- O'Neil

This quiz is due FRIDAY, OCTOBER 31 at the beginning of class. You may work collaboratively with your classmates, but TUTORS MAY NOT ASSIST YOU. You may use a calculator, but in order to get full credit you must write what you evaluated in your calculator. (For example, I would write  $4 \times 6 = 24$ , but just writing the answer of 24 is not sufficient.)

Solve the following. Show all work to justify your answer.

Simplify the ratio.

1) 0.07 to 0.42

Solve. Write your answer as a mixed numeral.

$$4) \frac{\frac{2}{3}}{\frac{2}{5}} = \frac{x}{\frac{4}{5}}$$

Find the rate as a ratio of distance to time. Round to the nearest hundredth where appropriate.

2) 40 m, 23 sec

Determine which purchase has the lower unit price.

3) The same kind of water is sold in two types of bottle. Which type has the lower unit price?

Five 14-oz bottles for \$3.64

Seven 20-oz bottles for \$7.70

Use a proportion to solve the problem. Write your answer in a short complete sentence.

5) Johnny's car will go 406 miles on 14.5 gallons of gasoline in highway driving. At this rate, how many gallons would be needed to travel 1445 miles on the highway?