

MATH 150 QUIZ 1 - Version A

September 11, 2013

Name: ANSWER KEY

Instructions: Use your own scrap paper. Write your answers in the space provided.

1. (1 point each) Evaluate:

(a) $\frac{1}{3} + \frac{1}{5} = \underline{\frac{8}{15}}$ (b) $\frac{1}{5} - \frac{1}{4} = \underline{-\frac{1}{20}}$

(c) $\frac{3}{4} \times \frac{5}{6} = \underline{\frac{5}{8}}$ (d) $\frac{4}{5} \div \frac{3}{2} = \underline{\frac{8}{15}}$

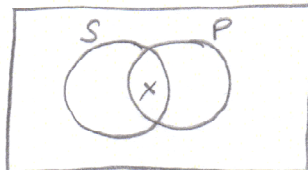
2. (1 point each) Write each of the following as a common fraction. You need not reduce it.

(a) $0.003 = \underline{\frac{3}{1000}}$ (b) $2.79 = \underline{\frac{279}{100}}$

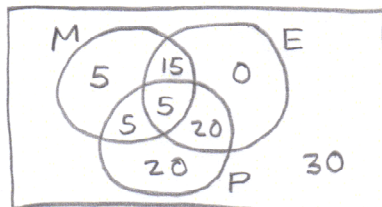
3. (1 point each) Evaluate the following:

(a) $10^2 \times 10^{-7} = \underline{10^{-5}}$ (b) $\frac{10^2}{10^{-3}} + 10^2 = \underline{100100}$

4. (1 point) Draw a Venn diagram to illustrate the categorical proposition Some S are P .



5. (a) (2 points) In a school of 100 students, 30 students study math; 40 students study English; 50 study physics; 10 study both math and physics; 20 study math and English; 5 study math, English and physics; and 20 study only physics. Draw a Venn diagram to illustrate this scenario.



(b) (1 point) How many students study none of these subjects? 30

Bonus: (1 point) What is a *valid* argument?

An argument in which the conclusion necessarily follows from the premises (if the premises are true, then the conclusion must be).