

Quiz 6A, MTH 2010 - No Calculators

Dr. Graham-Squire, Fall 2015

Name: _____

1. (3 points) If k represents an irrational number, which of the following operations must *always* result in an irrational number? Explain your reasoning!

(A) $k - k$

(B) $k \times k$

(C) $k \div k$

(D) $k + k$

2. (2 points) Simplify the expression by factoring and canceling:

$$\frac{35}{11} \cdot \frac{11}{40} + \frac{13}{32} \cdot \frac{16}{26}$$

3. (3 points) T-shirts are on sale for 20% off. Tasha paid \$8.73 for a shirt. What is the regular price of the shirt? There is no tax on clothing purchases under \$175.

Let p represent the regular price of a t-shirt. Which of the following equations is correct? Explain/show your reasoning!

(A) $0.8p = \$8.73$

(B) $\$8.73 + 0.2 \times \$8.73 = p$

(C) $1.2 \times \$8.73 = p$

(D) $p - 0.2 \times \$8.73 = p$

4. Write the rational number $\frac{17}{33}$ as a repeating decimal.