Homework

1. A number which can be expressed as $\dfrac{p}{q}$ where p and q are integers and $q \neq 0$ is
   - (a) natural number.
   - (b) whole number.
   - (c) integer.
   - (d) rational number.

2. A number of the form $\dfrac{p}{q}$ is said to be a rational number if
   - (a) p and q are integers.
   - (b) p and q are integers and $q \neq 0$
   - (c) p and q are integers and $p \neq 0$
   - (d) p and q are integers and $p \neq 0$ also $q \neq 0$.

3. The numerical expression $\dfrac{3}{8} + \dfrac{(-5)}{7} = \dfrac{-19}{56}$ shows that
   - (a) rational numbers are closed under addition.
   - (b) rational numbers are not closed under addition.
   - (c) rational numbers are closed under multiplication.
   - (d) addition of rational numbers is not commutative.

4. Which of the following is not true?
   - (a) rational numbers are closed under addition.
   - (b) rational numbers are closed under subtraction.
   - (c) rational numbers are closed under multiplication.
   - (d) rational numbers are closed under division.