

1. Ex. 2.5 # 18, 20, 24.
2. Prove that the product of a non-zero rational number and an irrational number is irrational.
3. Use a proof by cases to show that for any real numbers a , b and c ,
$$\min(a, \min(b, c)) = \min(\min(a, b), c).$$
4. Prove or disprove that if a and b are rational numbers then a^b is also rational.
5. Prove that given a real number x , if x is written as $n + \epsilon$ where n is an integer and $0 \leq \epsilon < 1$ then n and ϵ are unique.
6. Ex. 15.1 # 5(a) (give Boolean Function in dnf only).
7. Ex. 15.2 # 4(a), 5, 8 (give Boolean Function in dnf only).