

Pop Quiz 1

September 1, 2003

5 Points

1. **TRUE OR FALSE:** A partial order must be transitive.

2. **What is** $\log_{10} 1$?

3. **What is** $\log_2 8 + \log_2 16$?

4.

$$\sum_{i=0}^3 i^2 = ?$$

5.

$$\sum_{i=0}^{\infty} \left(\frac{1}{2}\right)^i = ?$$

Solutions to Pop Quiz 1

1. True.

2.

$$\log_{10} 1 = 0$$

3.

$$\log_2 8 + \log_2 16 = 3 + 4 = 7$$

4.

$$\sum_{i=0}^3 i^2 = 0^2 + 1^2 + 2^2 + 3^2 = 0 + 1 + 4 + 9 = 14$$

5.

$$\sum_{i=0}^{\infty} \left(\frac{1}{2}\right)^i = \frac{1}{1 - 1/2} = 2$$