

## Answer on Question #58058 – Math – Discrete Math

### Question

1. Any bunch of numbers is a \_\_\_\_\_, so long as the numbers come in pairs.  
group  
domain  
axiom  
relation

### Solution

Any bunch of numbers is a relation, so long as the numbers come in pairs.

**Answer:** relation

### Question

2. A \_\_\_\_ is just a set of ordered pairs.  
sets  
functions  
partition  
relation

### Solution

A relation is just a set of ordered pairs.

**Answer:** relation

### Question

3. Let  $N = \{1, 2, 3, 4, 5, \dots\}$ ,  $E = \{2, 4, 6, \dots\}$ ,  $F = \{1, 3, 5, \dots\}$ . Then,  $\{E, F\}$  is a \_\_\_\_\_ of  $N$ .  
functions  
partition  
relation  
sets

### Solution

$\{E, F\}$  is a partition of  $N$ .

**Answer:** partition.

### Question

4. A relation is a \_\_\_\_\_ ordering, if it is reflexive, anti-symmetric and transitive.  
partial  
complex  
group  
equal

### Solution

A relation is a partial ordering, if it is reflexive, anti-symmetric and transitive.

**Answer:** partial.

### Question

5. A relation is a set of an \_\_\_\_\_ relation, if it is reflexive, transitive and symmetric.  
simple  
equal  
balance  
equivalence

## Solution

A relation is a set of an equivalence relation, if it is reflexive, transitive and symmetric.

**Answer:** equivalence.