

## Example 3: packets

### HOW MANY PACKETS ARE NEEDED?

- ❑ **Example 3:** In a DoS attack using ICMP Echo Request (ping) packets of **50000 bytes** in size are sent to flood a target organization.
- ❑ The **numbers of packets** sent by the attacker to **launch** a successful DoS attack will depend on speed of the link.
1. On a **1.5 Megabit per second (Mbps)** link  
❑  $1500000 / (50000 * 8) = 3.75$  packets per second.
  2. On a **2 Mbps** link  
❑  $2000000 / (50000 * 8) = 5$  packets per second.
  3. On a **10 Mbps** link  
❑  $10000000 / (50000 * 8) = 25$  packets per second
  4. On a **100 Mbps** link  
❑  $100000000 / (50000 * 8) = 250$  packets per second

Solution ①  $\frac{1.5 \times 10^6}{50000 \times 8} = 3.75$

②  $\frac{2 \times 10^6}{50000 \times 8} = 5$

③  $\frac{10 \times 10^6}{50000 \times 8} = 25$

④  $\frac{100 \times 10^6}{50000 \times 8} = 250$