Forwarding table for router R2.

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**ARP Packet Format for mapping IP addresses into Ethernet addresses**

- **HardwareType**: type of physical network (e.g., Ethernet)
- **ProtocolType**: type of higher layer protocol (e.g., IP)
- **HLen & PLen**: length of physical and higher-layer protocol addresses
- **Operation**: request or response
- **Source/Target Hardware/Protocol addresses**
Prefix Representation in CIDR

- **192.4.16/20**: 192.4.16.0 – 192.4.31.255 (2^{12} addresses)

```
11000000 00000100 00010000 00000000
```

```
11000000 00000100 00011111 11111111
```

network part (20 bits)  host part (12 bits)
Packet Forwarding in CIDR

<table>
<thead>
<tr>
<th>NetNumber/MaskLength</th>
<th>NextHop</th>
</tr>
</thead>
<tbody>
<tr>
<td>200.23.16.0/20</td>
<td>R1</td>
</tr>
<tr>
<td>171.69.0.0/16</td>
<td>R2</td>
</tr>
<tr>
<td>171.69.10.0/24</td>
<td>R3</td>
</tr>
</tbody>
</table>

What will happen if a packet comes in addressed to 171.69.10.4?