

Figure 4.20 Multicast peer joins a group and sends and receives datagrams

```
import java.net.*;
import java.io.*;
public class MulticastPeer{
    public static void main(String args[]){
        // args give message contents & destination multicast group (e.g. "228.5.6.7")
        MulticastSocket s =null;
        try {
            InetAddress group = InetAddress.getByName(args[1]);
            s = new MulticastSocket(6789);
            s.joinGroup(group);
            byte [] m = args[0].getBytes();
            DatagramPacket messageOut =
                new DatagramPacket(m, m.length, group, 6789);
            s.send(messageOut);
            byte[] buffer = new byte[1000];
            for(int i=0; i< 3; i++) { // get messages from others in group
                DatagramPacket messageIn =
                    new DatagramPacket(buffer, buffer.length);
                s.receive(messageIn);
                System.out.println("Received:" + new String(messageIn.getData()));
            }
            s.leaveGroup(group);
        } catch (SocketException e){System.out.println("Socket: " + e.getMessage());}
        } catch (IOException e){System.out.println("IO: " + e.getMessage());}
        } finally { if(s != null) s.close();}
    }
}
```