

8 A business is creating a local area network (LAN) in its office.

(a) The business is deciding which topology to use.

Tick (✓) **one or more** boxes in each row to identify the topology, or topologies, each statement describes.

Statement	Bus	Star	Mesh
all devices connect to one central device			
all devices connect to a central cable			
multiple paths for the packets to travel along			
robust against damage because if any line fails, the rest of the network retains full functionality			
most likely to lose data through collisions			

[5]

(b) The LAN will connect to the internet through a router. The router has a public IPv6 address.

(i) State why the router has a public IP address.

.....
..... [1]

(ii) One difference between an IPv4 and IPv6 address is that the numbers in an IPv4 address are separated by full stops and in an IPv6 address they are separated by colons.

Identify **two other** differences between an IPv4 and IPv6 address.

1
.....
.....
2
.....
.....

[2]