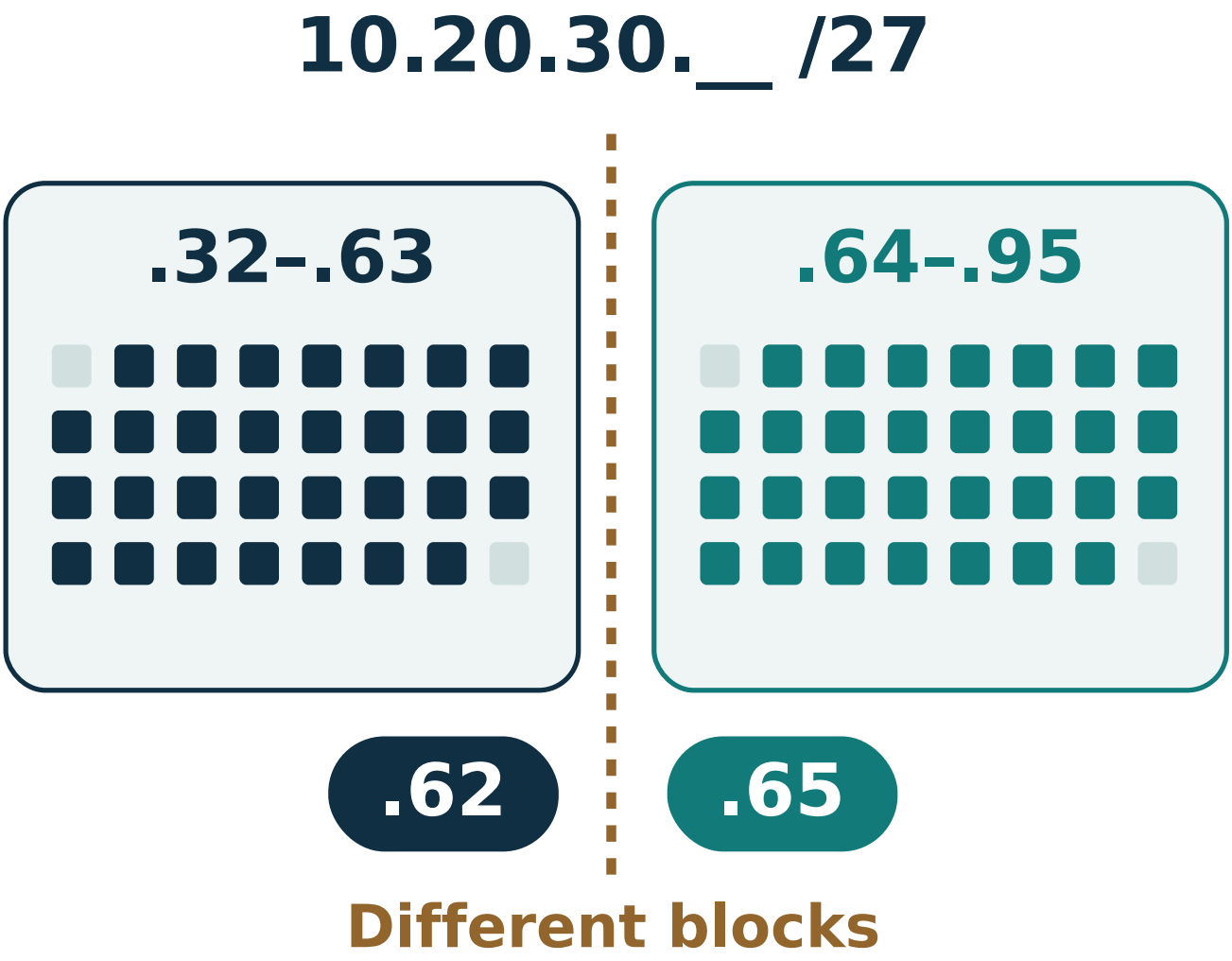
NET-U10 / SEE THE CONCEPT

Three addresses apart. Two different subnets.

Read the visual model, then test the reasoning.



The prefix decides membership, not the distance between addresses.

The source is 10.20.30.62/27 and the destination is 10.20.30.65. Their last octets differ by only 3. Does that put them in the same subnet?

NET-U10 / WORK THE CASE

Three addresses apart. Two different subnets.

Follow the stated conditions. Check the answer against the original case.

SOURCE BLOCK 10.20.30.32/27	
Network	.32
Ordinary hosts	.33 - .62
Broadcast	.63

DESTINATION BLOCK 10.20.30.64/27	
Network	.64
Ordinary hosts	.65 - .94
Broadcast	.95

.62	.63	.64	.65
SOURCE HOST	BROADCAST	NETWORK	DESTINATION HOST

1 FIND THE BLOCK

A /27 has 32 addresses. The source belongs to 10.20.30.32/27: network .32, broadcast .63, ordinary hosts .33 through .62.

2 CHECK THE DESTINATION

Destination .65 belongs to 10.20.30.64/27. It is off-subnet under this mask; matching the first three octets is not enough.

3 TEST THE ACTUAL PATH

Communication needs an appropriate routed path and policy. Address arithmetic verifies membership, not physical connectivity or a working configuration.

TEST YOUR REASONING

Would switching both endpoints to /26 put .62 and .65 together?

No. With /26, .62 belongs to the .0/26 block and .65 to .64/26. Recompute the prefix instead of assuming a larger block crosses this boundary.

In these ordinary IPv4 examples, network and broadcast addresses are reserved. A target .63 is the source subnet’s broadcast address, not an ordinary host.