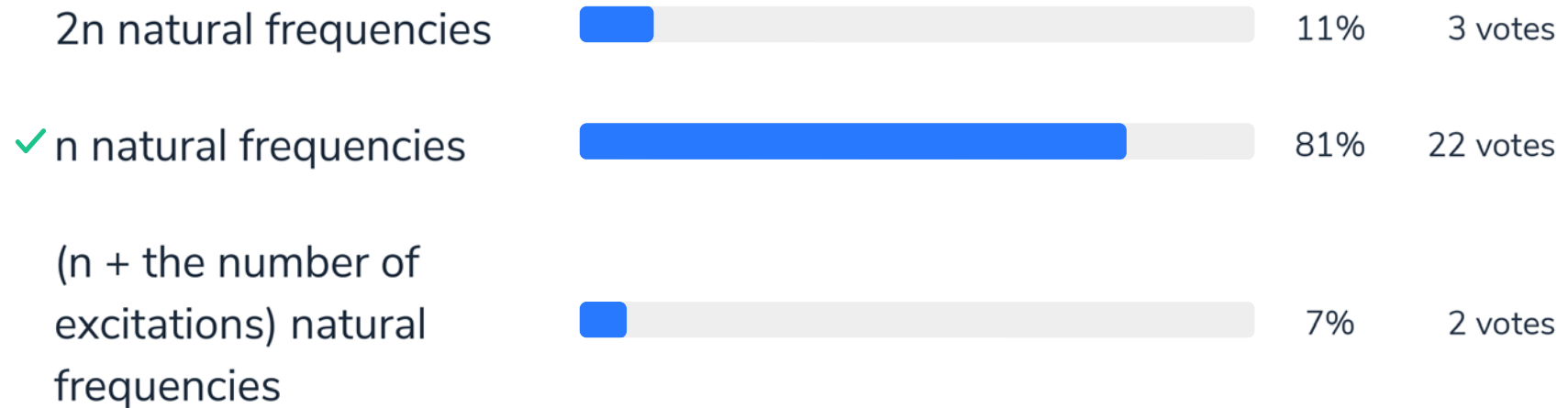


VIB2019_MD0F

Number of participants: 34

1

If a system has n degrees of freedom, it has



2

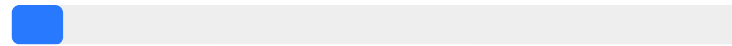
The mode shapes are orthogonal with respect to the

✓ stiffness matrix		76%	22 votes
✓ mass matrix		52%	15 votes
damping matrix		52%	15 votes

3

The interest of projecting the equations of motion in the modal domain is to:

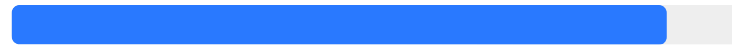
reduce the number of equations to solve



7%

2 votes

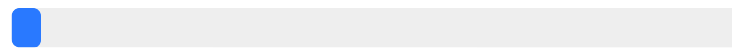
✓ decouple the equations of motion and facilitate the resolution



89%

24 votes

include the damping properly in the model

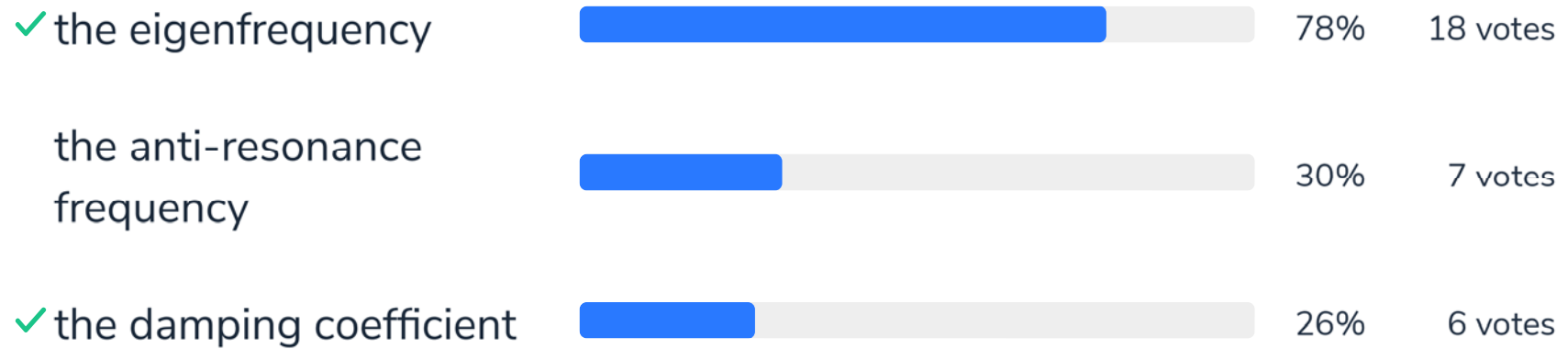


4%

1 vote

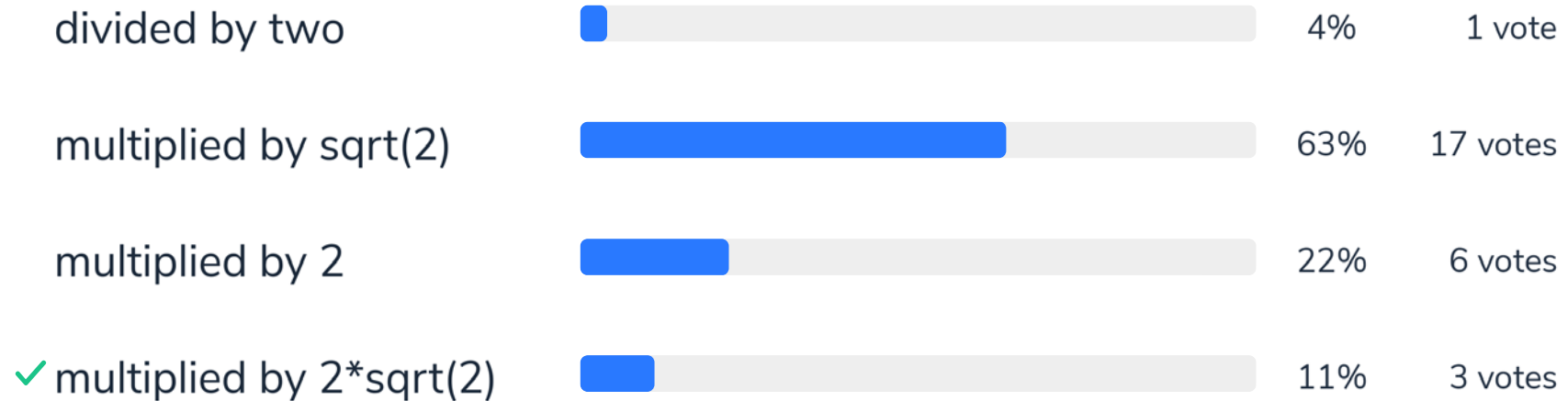
4

Which of these quantities is a global quantity for a given structure



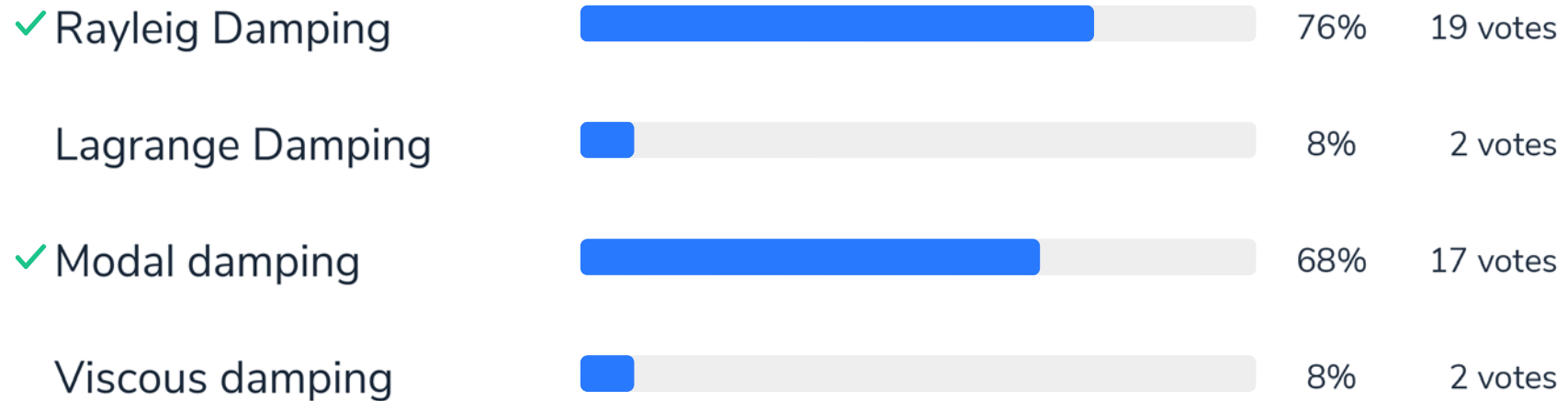
5

A mass-spring system consists of a rigid mass at the end of a cantilever beam. If the length of the bar is divided by two, the natural frequency is



6

What kind of hypothesis can be made on the damping matrix to decouple the equations of motion in the modal domain ?



7

How many mode shapes and eigenfrequencies does this building simplified model have ?

