

## QUESTION

Two identical rectangular frames are shown. The left frame is supported by a pin support at the bottom left corner and a roller support at the bottom right corner. The right frame is supported by a pin support at the bottom left corner and a roller support at the top right corner. Both frames are subjected to a uniformly distributed load acting vertically downwards on the top horizontal member.



Member	Reaction	Value
Pin Support (Bottom Left) <td>Vertical Reaction</td> <td><math>\frac{wL}{2}</math></td>	Vertical Reaction	$\frac{wL}{2}$
Pin Support (Bottom Left) <td>Horizontal Reaction</td> <td><math>\frac{wL}{2}</math></td>	Horizontal Reaction	$\frac{wL}{2}$
Roller Support (Bottom Right) <td>Vertical Reaction</td> <td><math>\frac{wL}{2}</math></td>	Vertical Reaction	$\frac{wL}{2}$

Reaction forces are shown in the diagram.



Member	Reaction	Value
Pin Support (Bottom Left) <td>Vertical Reaction</td> <td><math>\frac{wL}{2}</math></td>	Vertical Reaction	$\frac{wL}{2}$
Pin Support (Bottom Left) <td>Horizontal Reaction</td> <td><math>\frac{wL}{2}</math></td>	Horizontal Reaction	$\frac{wL}{2}$
Roller Support (Top Right) <td>Vertical Reaction</td> <td><math>\frac{wL}{2}</math></td>	Vertical Reaction	$\frac{wL}{2}$

Reaction forces are shown in the diagram.