



Note: Figure not drawn to scale.

When designing a stairway, an architect can use the riser-tread formula $2h + d = 25$, where h is the riser height, in inches, and d is the tread depth, in inches. For any given stairway, the riser heights are the same and the tread depths are the same for all steps in that stairway.

The number of steps in a stairway is the number of its risers. For example, there are 5 steps in the stairway in the figure above. The total rise of a stairway is the sum of the riser heights as shown in the figure.