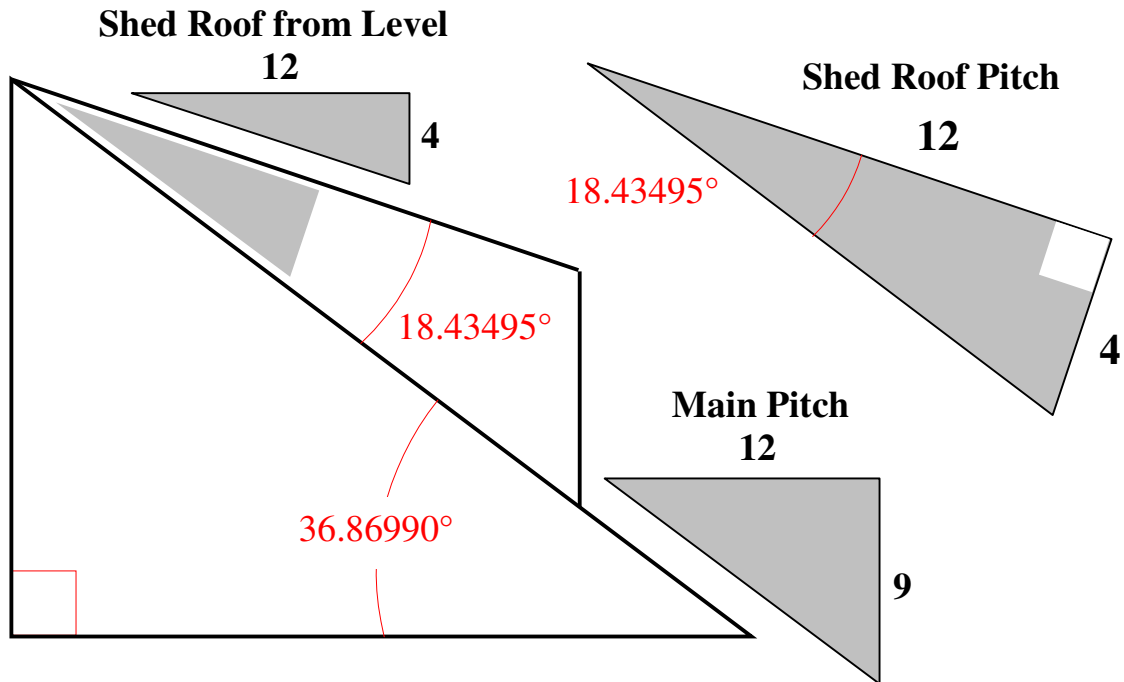


Sum of Pitches



$$\text{Sum of Pitches} = \frac{\left[\text{Pitch 1} + \text{Pitch 2} \right]}{1 - \left[\text{Pitch 1} \times \text{Pitch 2} \right]}$$

The sum of the Shed roof pitch, and its pitch measured from level equal the Main Roof pitch.

$$\text{Main Roof Pitch} = \frac{\left(\frac{4}{12} + \frac{4}{12} \right)}{1 - \left(\frac{4}{12} \times \frac{4}{12} \right)} = \frac{3}{4} = \frac{9}{12}$$

$$\text{Main Roof Pitch Angle} = \arctan \left(\frac{9}{12} \right) = 36.86990^\circ$$