## Difference of Pitches <br> Pitch and Angle between Intercepting Rafters

## $71.56505^{\circ}$



Any equivalent fractions, decimals, or the tangents of the angles may be substituted for the over- 12 ratios.


$$
\text { Difference of Pitches }=\frac{(\text { Pitch } 1-\text { Pitch } 2)}{1+(\text { Pitch } 1 \times \text { Pitch } 2)}
$$

Difference of Pitches:
Pitch at Intercept $=\frac{\left(\frac{15}{12}-\frac{4}{12}\right)}{1+\left(\frac{15}{12} \times \frac{4}{12}\right)}=\frac{11}{17}=\frac{7 \frac{3}{4}+}{12}$
Difference of Complementary Pitches:
Pitch at Intercept $=\frac{\left(\frac{12}{4}-\frac{12}{15}\right)}{1+\left(\frac{12}{4} \times \frac{12}{15}\right)}=\frac{11}{17}=\frac{7 \frac{3}{4}+}{12}$
Angle between Intercepting Rafters $=\arctan \left(\frac{11}{17}\right)=32.90524^{\circ}$

