

Gambrel Roof Calculator

(Gambrel Attic Truss)

Out-to-Out Span: 32 ft.  
 Lower Roof Pitch (P1): 24 :12  
 Upper Roof Pitch (P2): 7 :12

Coefficients of Quadratic Equation:

a: -3.659722  
 b: -42.88889  
 c: 343.1111

X1: 0.000 ft. 0' 0"  
 Y1: 0.000 ft. 0' 0"  
 X2: 5.458 ft. 5' 5-1/2"  
 Y2: 10.916 ft. 10' 11"  
 X3: 16.000 ft. 16' 0"  
 Y3: 17.066 ft. 17' 13/16"  
 X4: 26.542 ft. 26' 6-1/2"  
 Y4: 10.916 ft. 10' 11"  
 X5: 32.000 ft. 32' 0"  
 Y5: 0.000 ft. 0' 0"

$X_2 = [-b \pm \sqrt{b^2 - 4ac}] / 2a$   
 $X_2 = 5.458016$

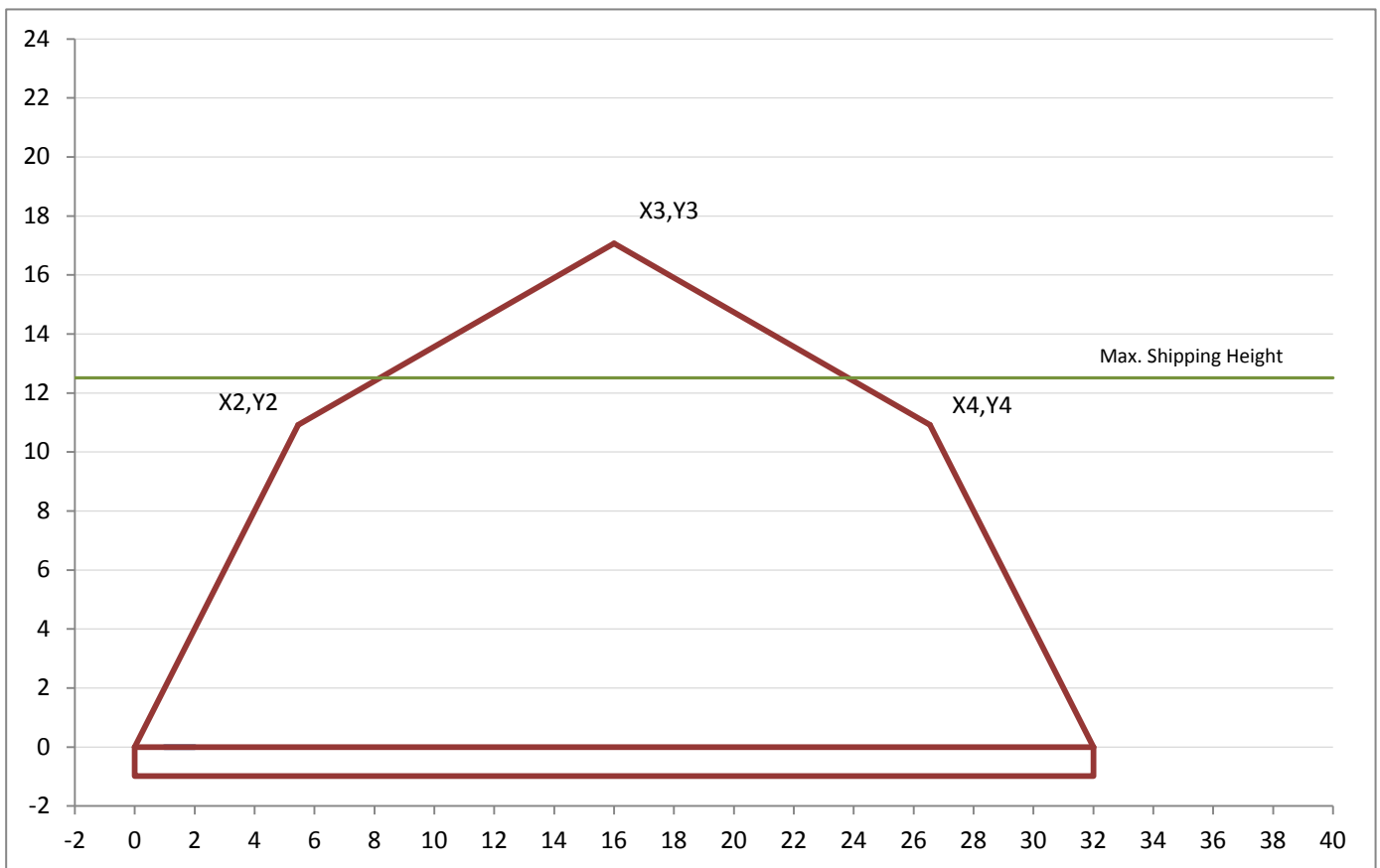
L1: 12.204 ft. 12' 2-7/16"  
 L2: 12.204 ft. 12' 2-7/16"

Max. Hgt: 13.5 ft. (shipping)

\*Note: 13'-6" is typical max. truss hgt.

Total Truss Hgt: 18.055 ft. 18' 11/16"

Bottom Chord Depth: 11.875 in.



Note: This calculator makes the assumption that the lower roof leg and the upper roof leg are equal in length.