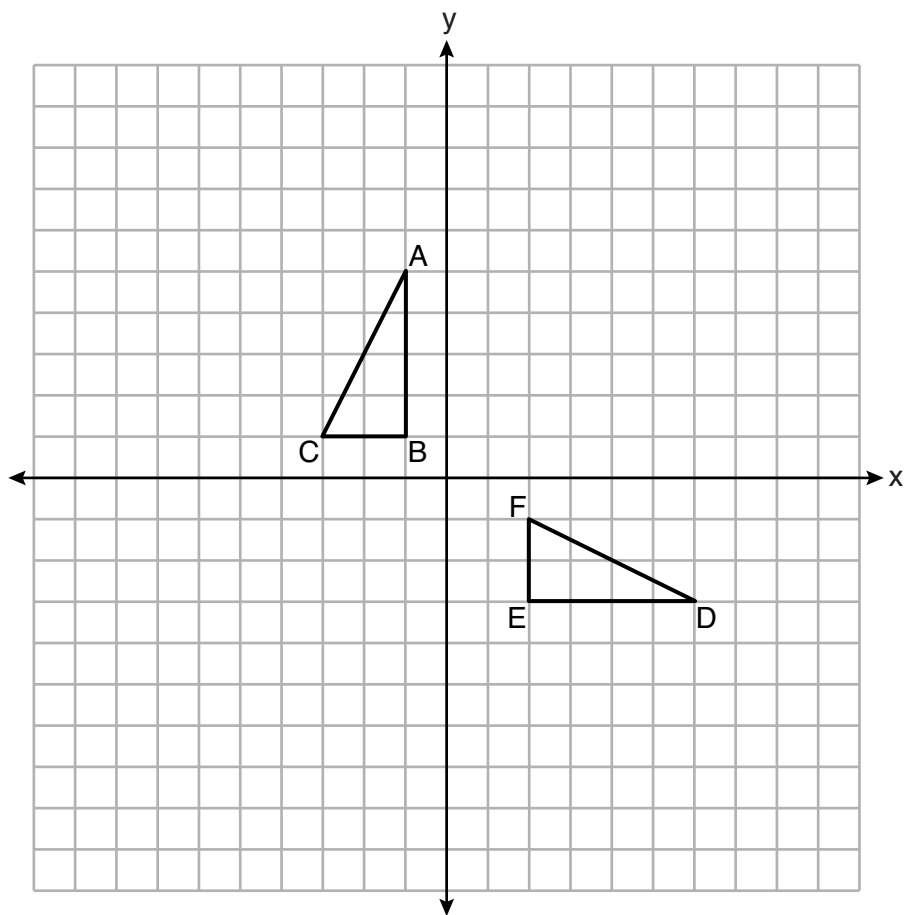
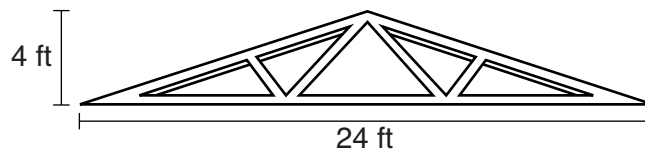


26 On the set of axes below, $\triangle ABC$ and $\triangle DEF$ are graphed.



Describe a sequence of rigid motions that would map $\triangle ABC$ onto $\triangle DEF$.

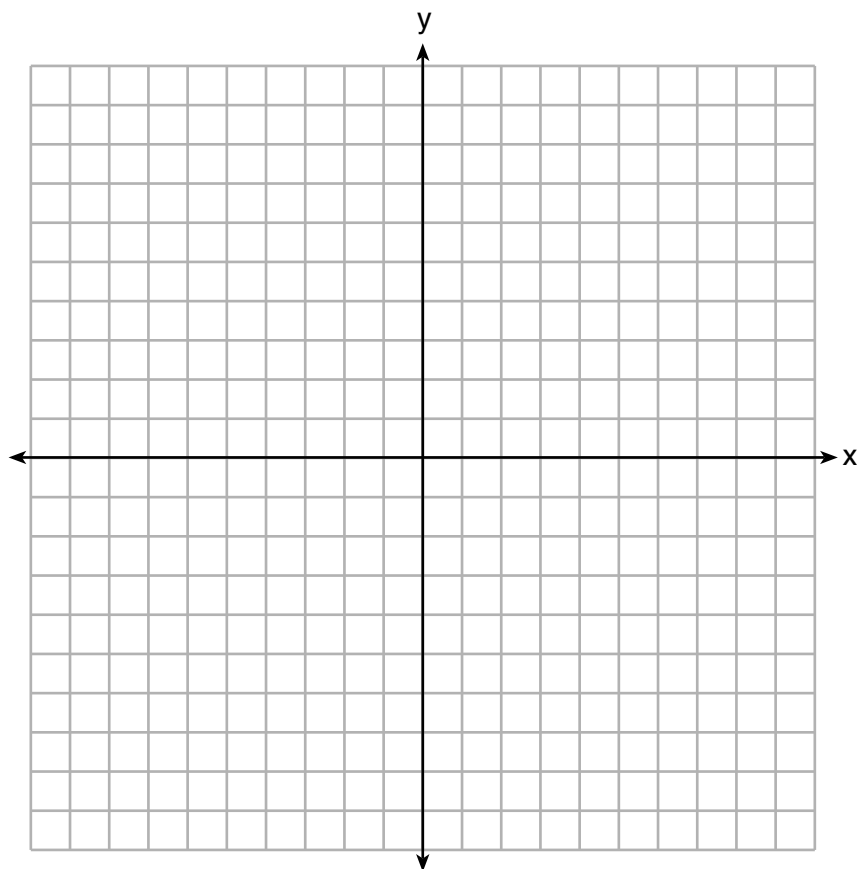
- 27** As shown in the diagram below, a symmetrical roof frame rises 4 feet above a house and has a width of 24 feet.



Determine and state, to the *nearest degree*, the angle of elevation of the roof frame.

- 28** Directed line segment AB has endpoints whose coordinates are $A(-2,5)$ and $B(8,-1)$. Determine and state the coordinates of P , the point which divides the segment in the ratio 3:2.

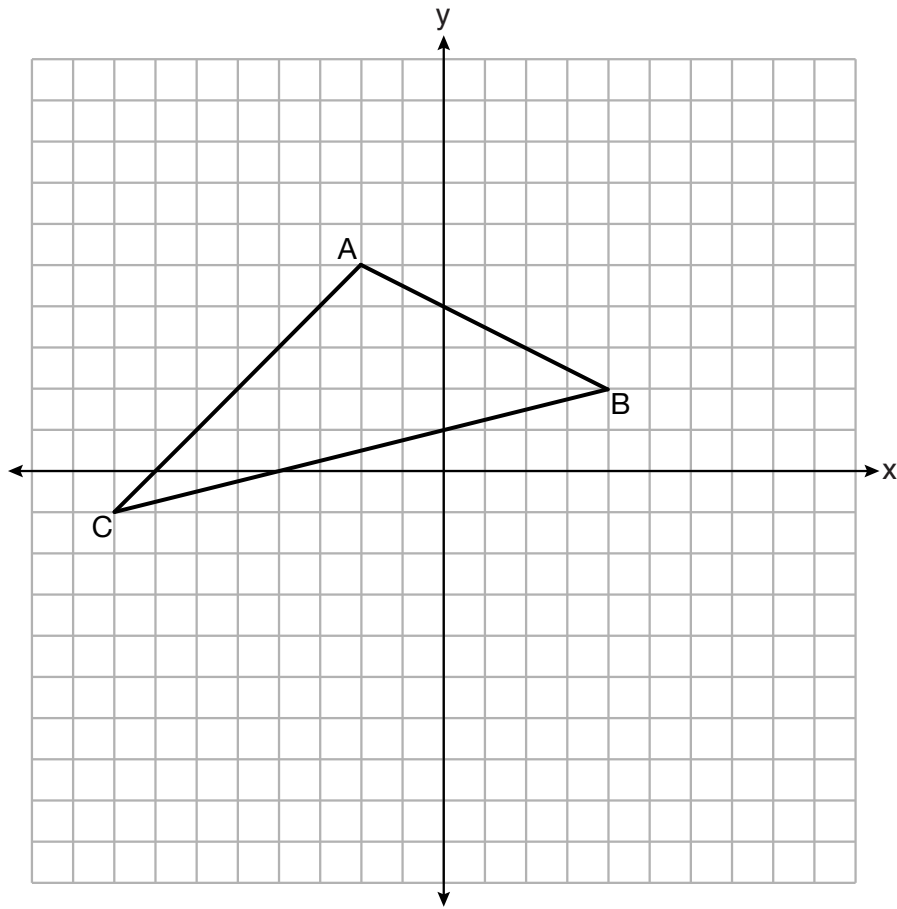
[The use of the set of axes below is optional.]



- 29** In $\triangle ABC$, $AB = 5$, $AC = 12$, and $m\angle A = 90^\circ$. In $\triangle DEF$, $m\angle D = 90^\circ$, $DF = 12$, and $EF = 13$. Brett claims $\triangle ABC \cong \triangle DEF$ and $\triangle ABC \sim \triangle DEF$.
Is Brett correct? Explain why.

30 The volume of a triangular prism is 70 in^3 . The base of the prism is a right triangle with one leg whose measure is 5 inches. If the height of the prism is 4 inches, determine and state the length, in inches, of the other leg of the triangle.

- 31 Triangle ABC with coordinates $A(-2,5)$, $B(4,2)$, and $C(-8,-1)$ is graphed on the set of axes below.



Determine and state the area of $\triangle ABC$.