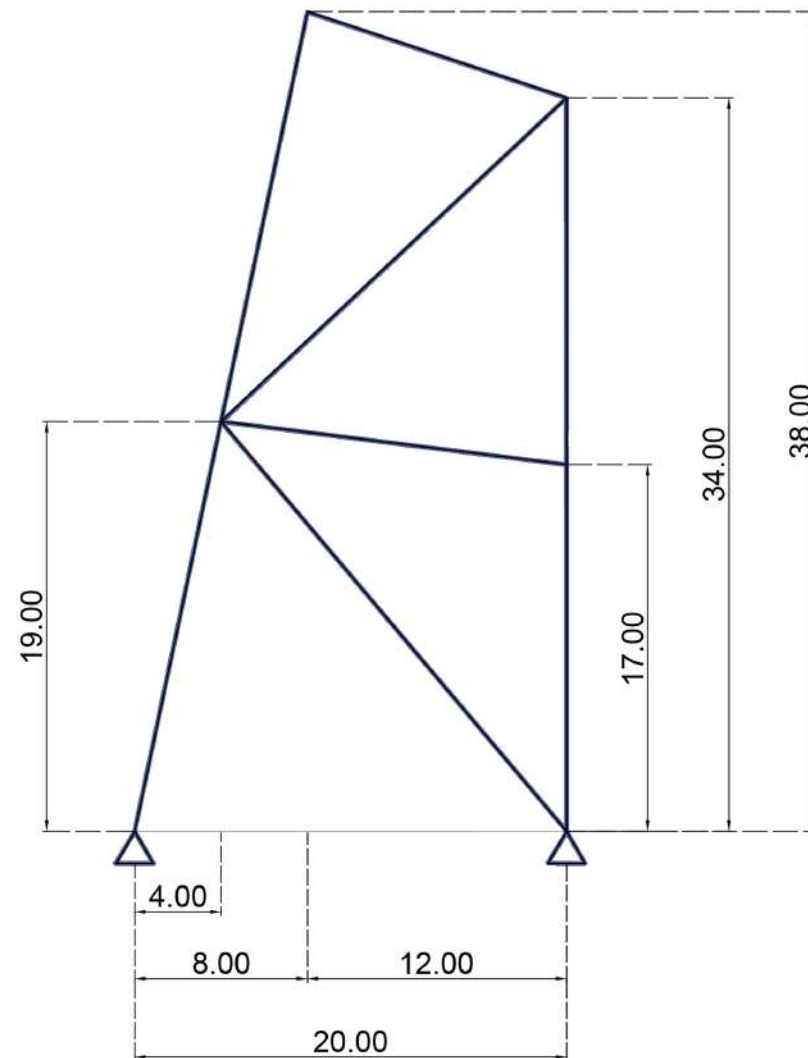
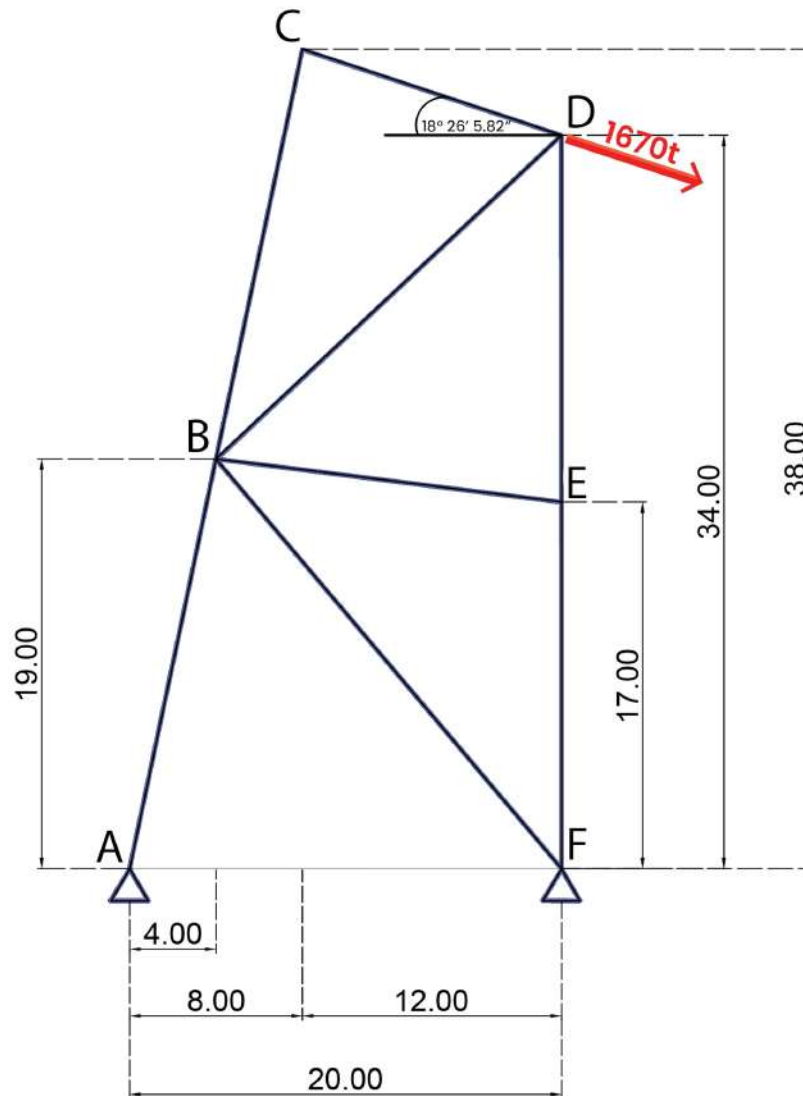






1) Diseñar el **apoyo reticulado** de la viga

2) Colocar la resultante de la viga en el apoyo con su correspondiente valor, sentido y ángulo.

Para ingresar los datos al programa necesitaremos convertir

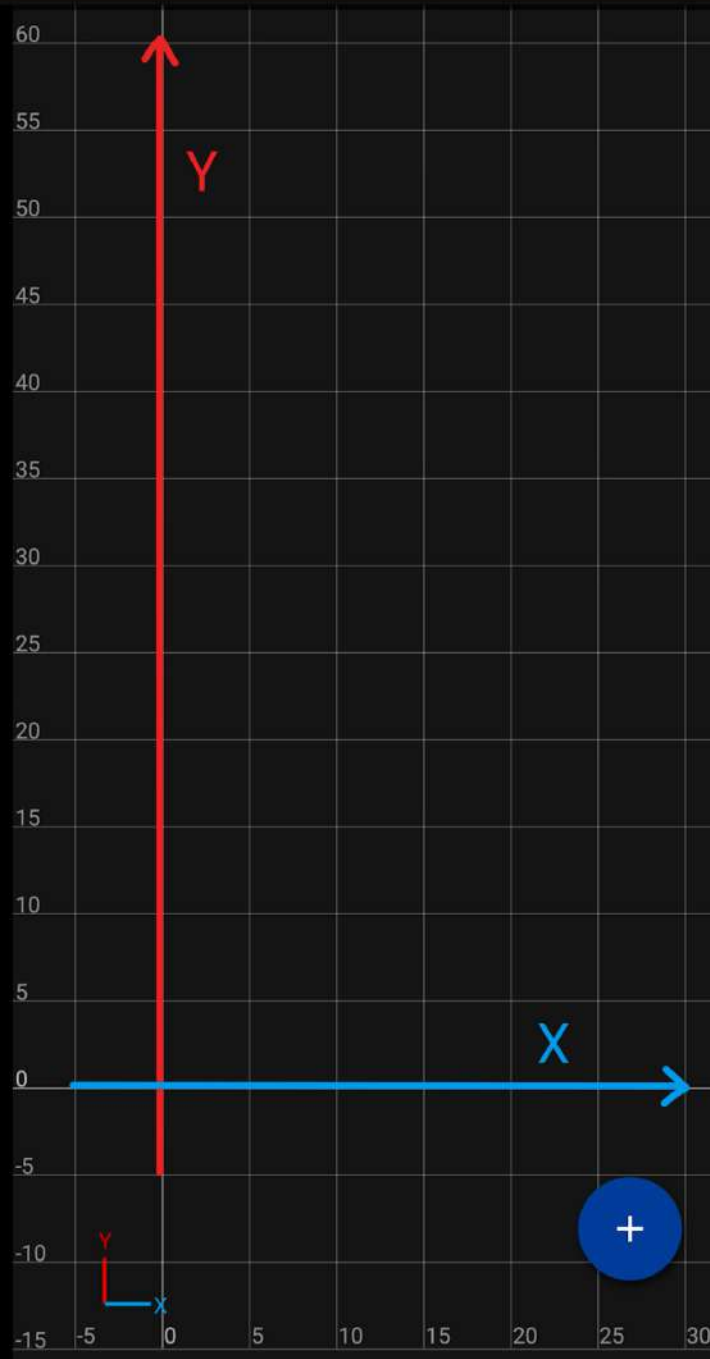
$$R = 1670t = 1670000\text{Kg}$$

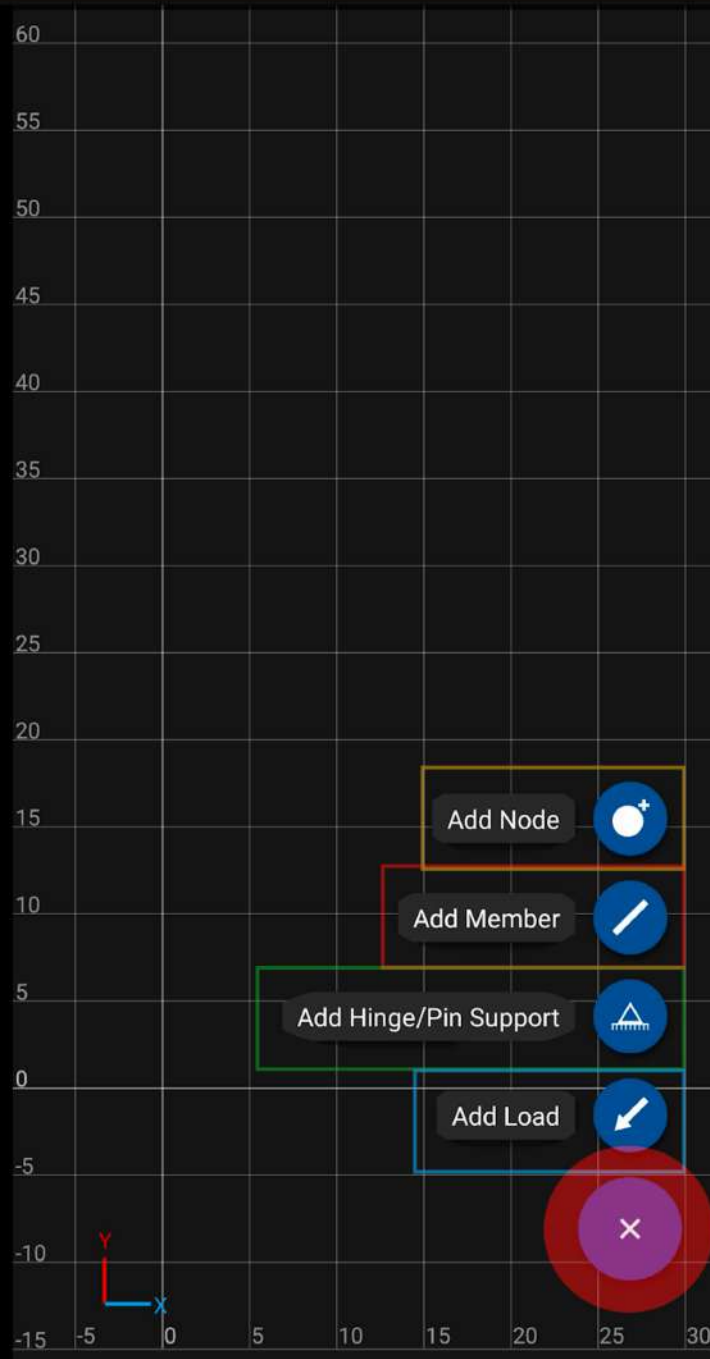
$$\alpha = 18^\circ 26' 5.82'' = 341^\circ$$

3) Nombrar los puntos de intersección entre las barras.

4) Abrir programa **SW TRUSS** para armar el apoyo y calcular los esfuerzos del mismo.

Al abrir el programa nos encontramos con 2 ejes "X" e "Y" donde colocaremos las coordenadas.





Vamos a encontrar a la derecha en el "+" las opciones para armar nuestro modelo

1) Nodos

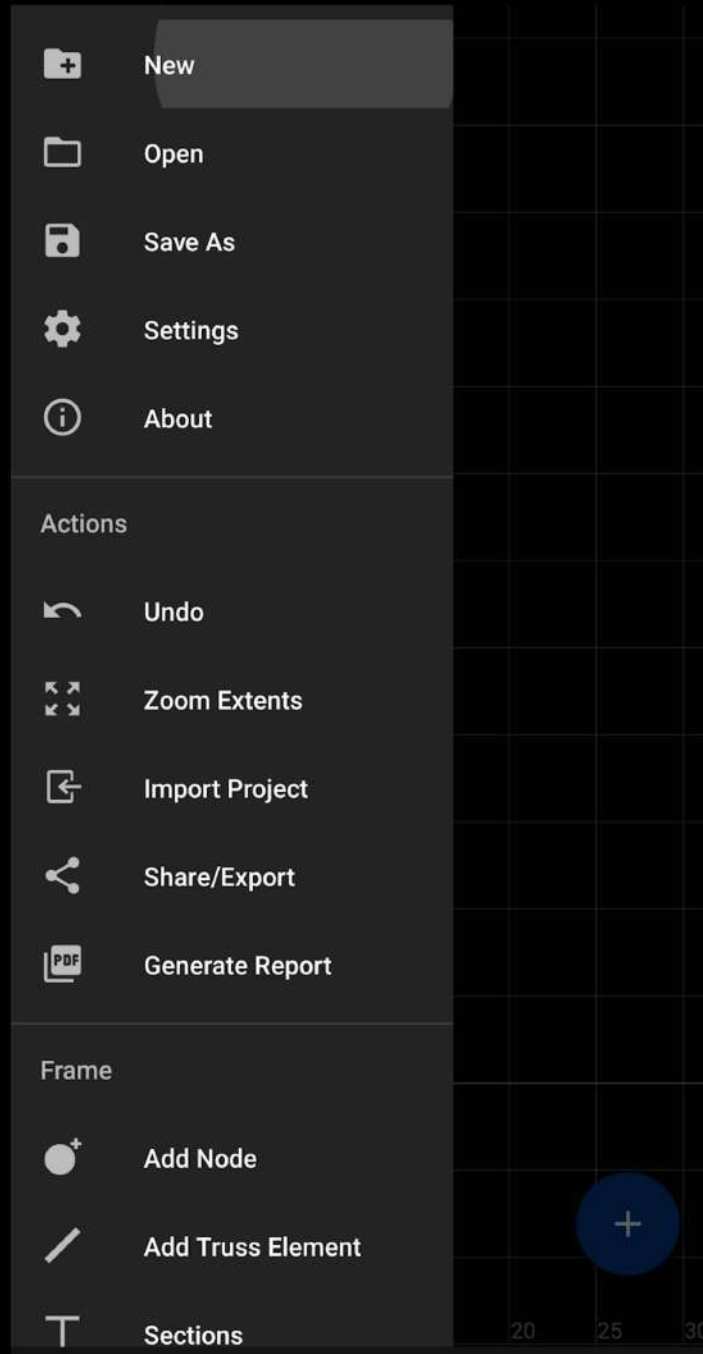
2) Barras

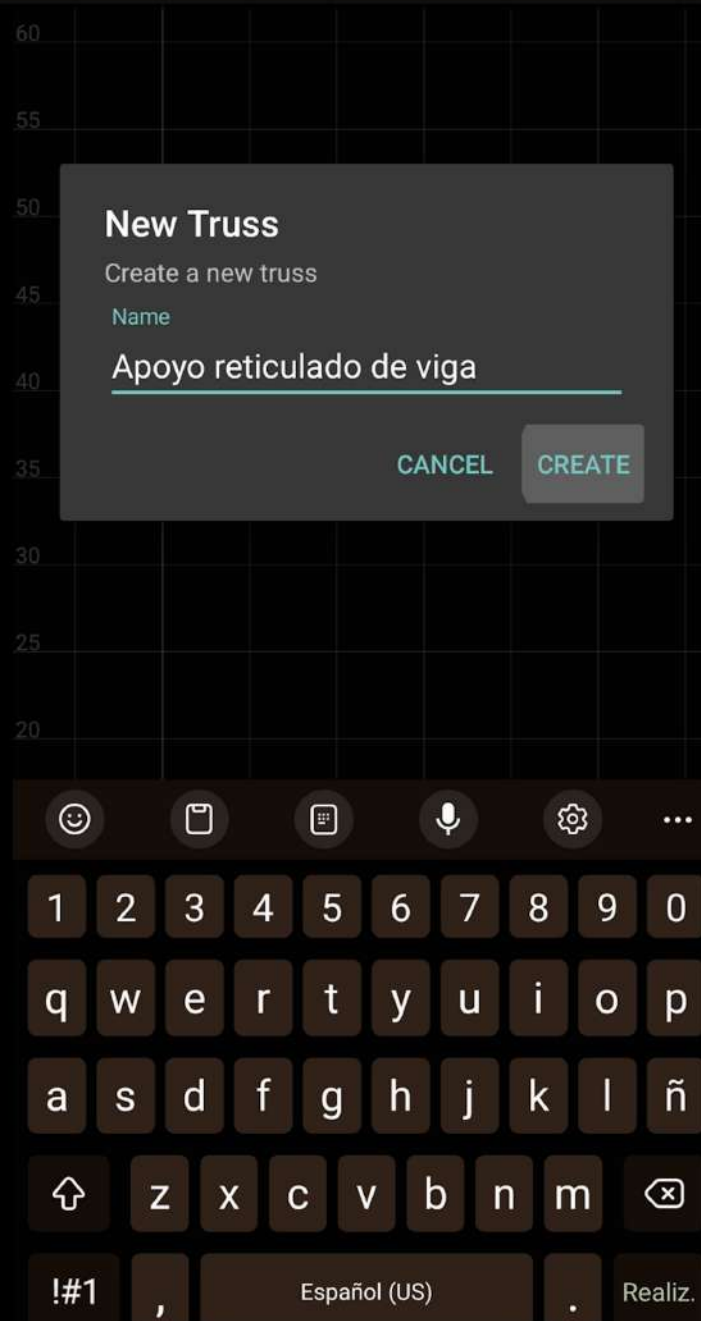
3) Apoyos

4) Cargas

A la izquierda tenemos el **Menú**.

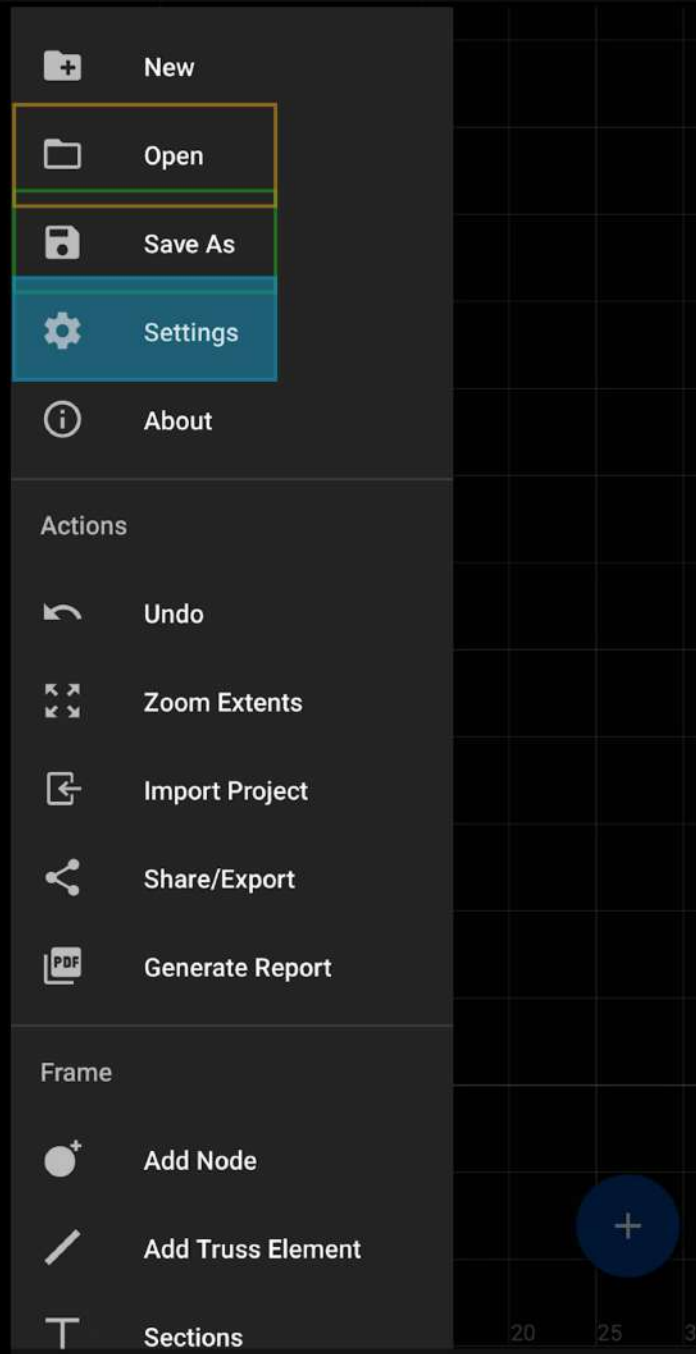
Crearemos y nombraremos
nuestro proyecto





A la izquierda tenemos el **Menú**.

Crearemos y nombraremos
nuestro proyecto



A la izquierda tenemos el **Menú**.

También podremos

- 1) Abrir proyectos anteriores
- 2) Guardar nuevos cambios
- 3) Configurar preferencias

Ajustamos:

- Longitud: m
- Fuerza: Kgf
- Precisión: 0.00

Units

Length

m

Cross Section Area

m²

Young's Modulus (E)

GPa (kN/mm²)

Force

kgf

Moment of Inertia (I)

mm⁴

Unit Weight

kN/m³

Displacement

m

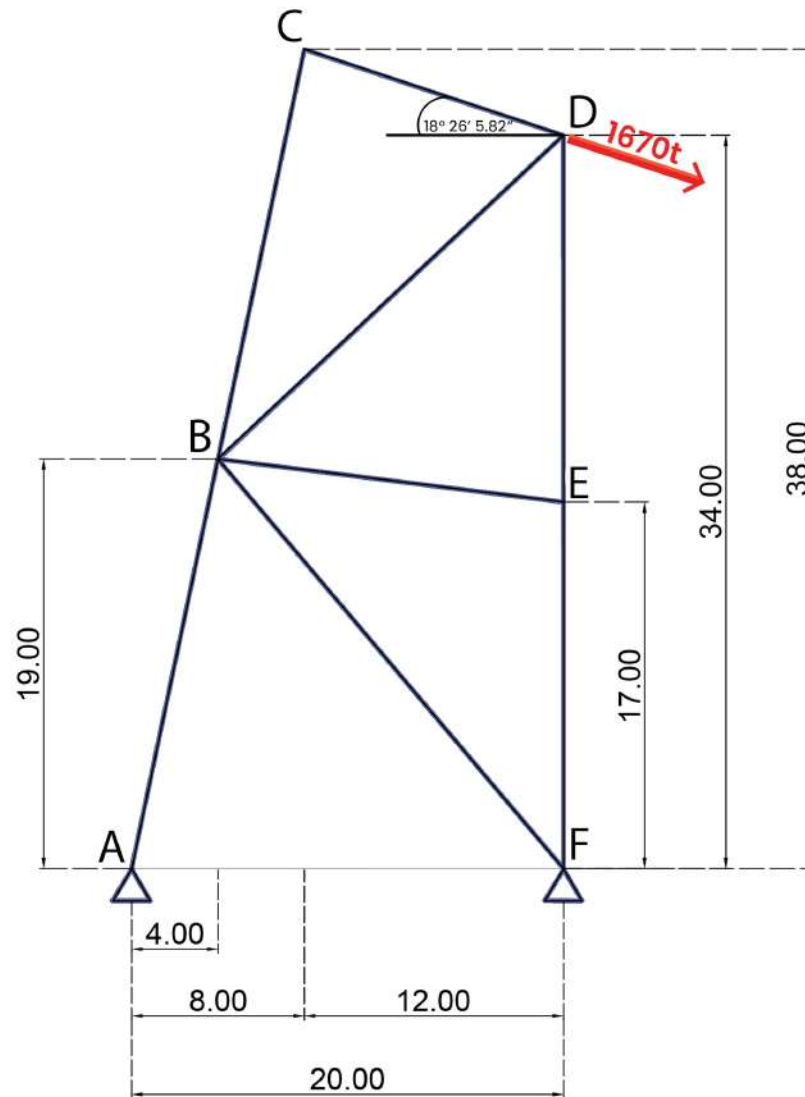
Precision

Length

0.00

Force

0.00



65

60

55

50

45

40

35

30

25

20

15

10

5

0

-5

-10

-15

-5

0

5

10

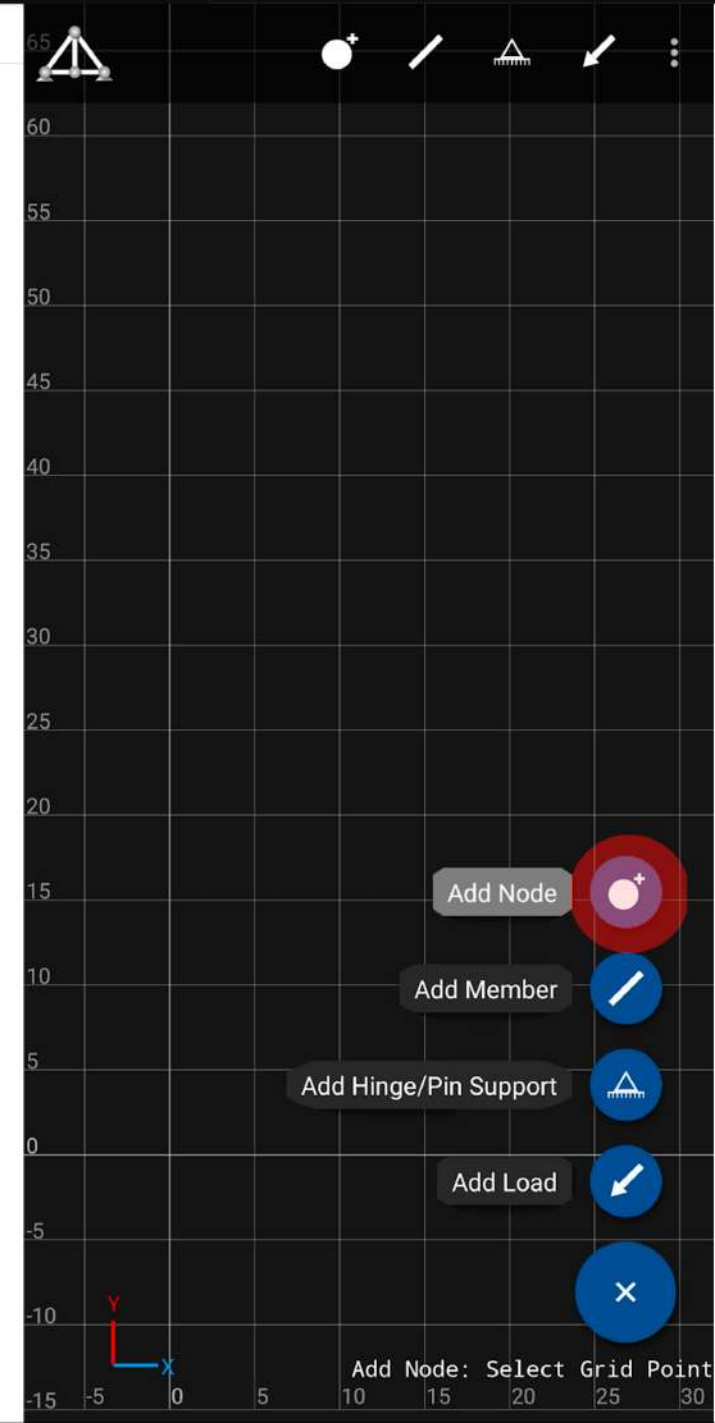
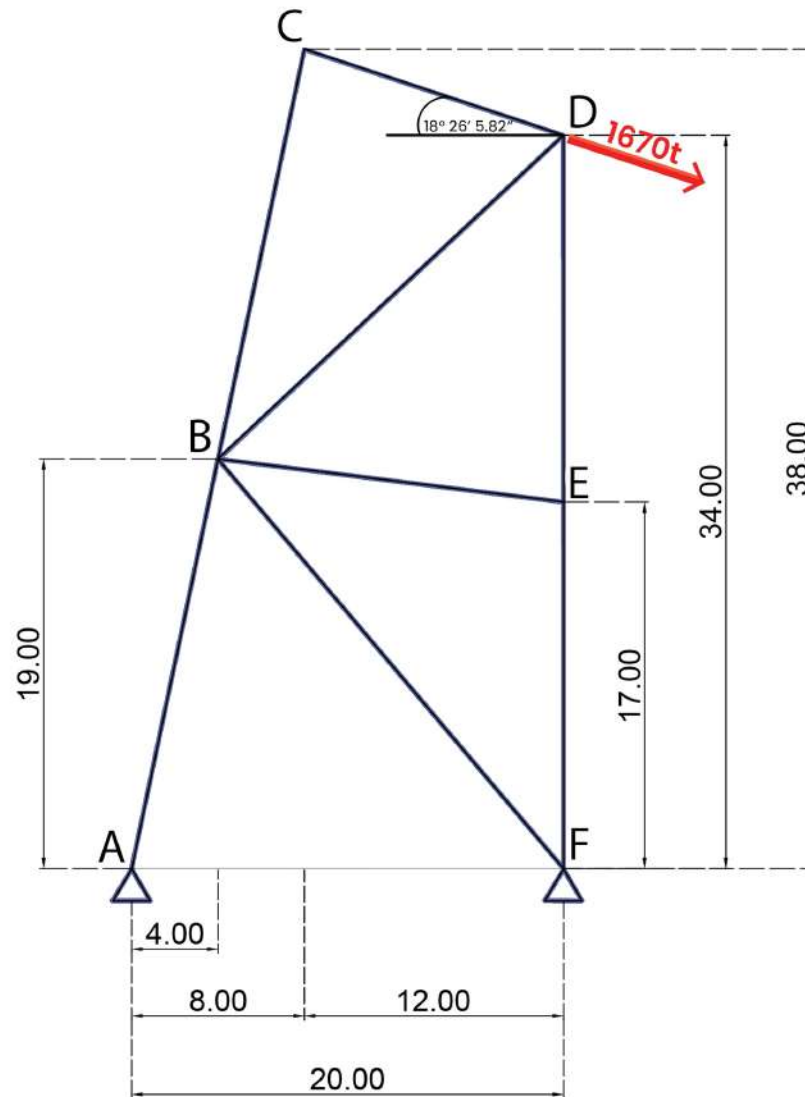
15

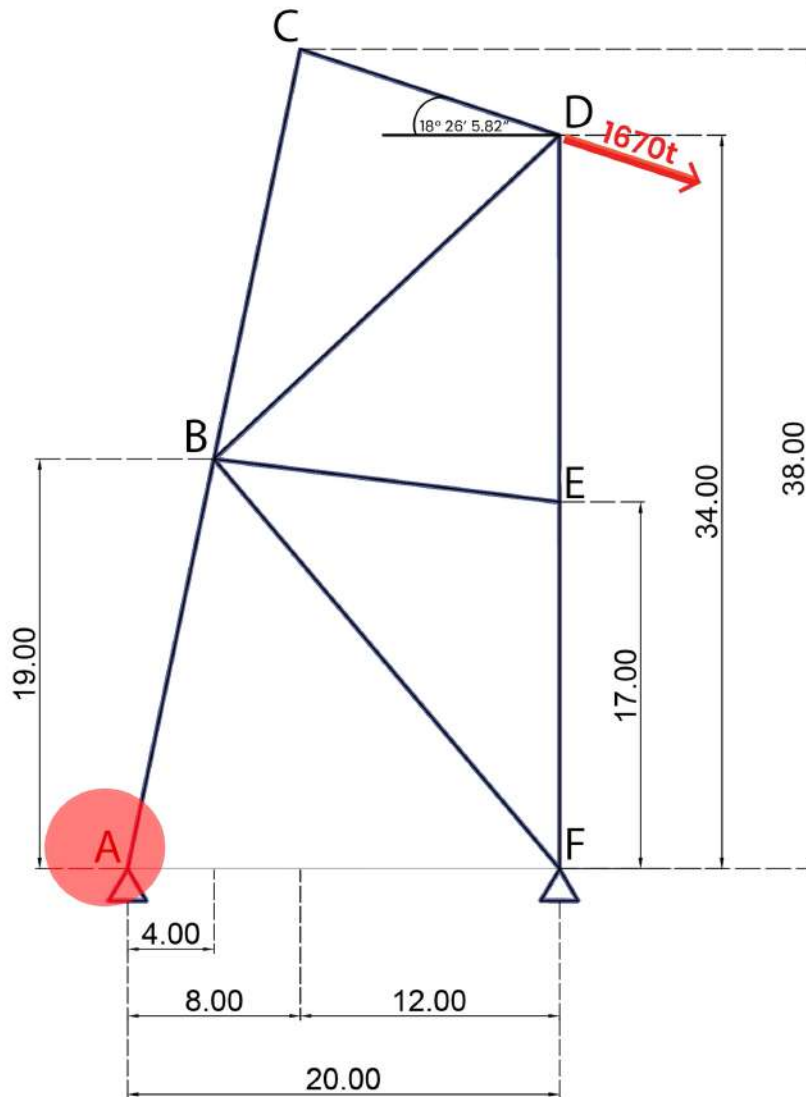
20

25

30







Tocar en el espacio de trabajo para ubicar el primer nodo

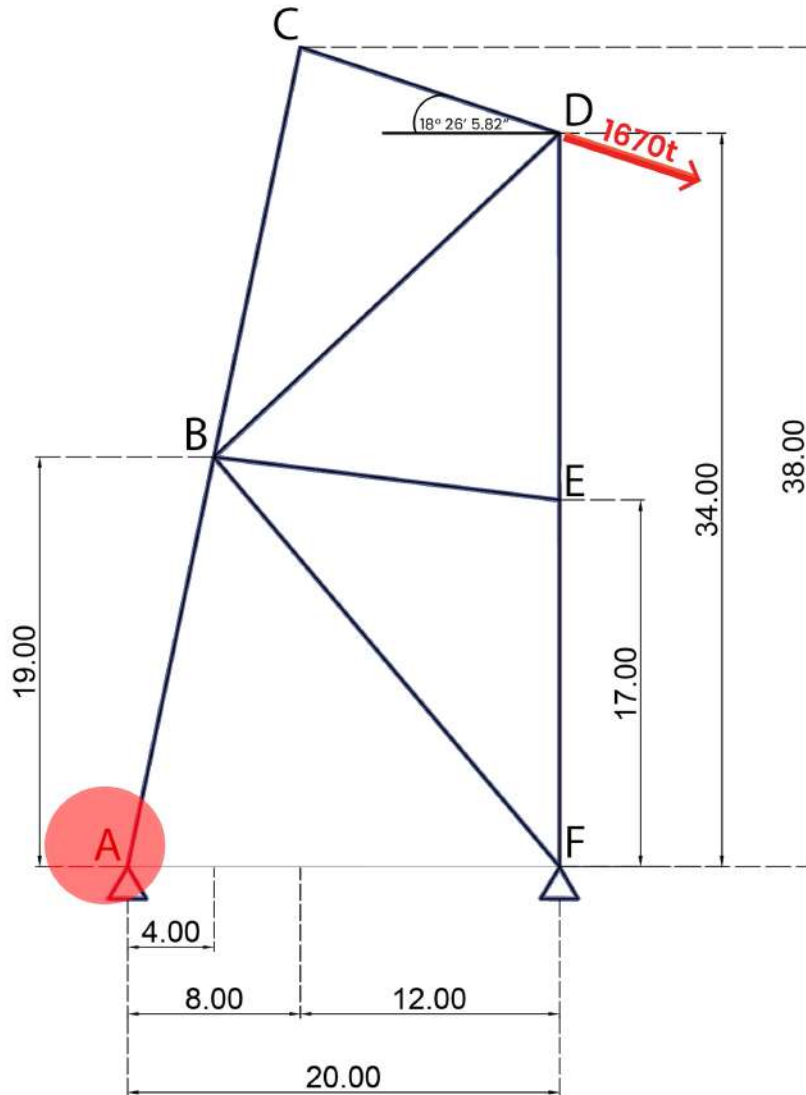
Add Node

Add Member

Add Hinge/Pin Support

Add Load

X



Node ID: 0
X: 10.00m
Y: 15.00m
Support: NONE

Tocar sobre el punto hasta que cambie su color a verde y editar

Add Node



Add Member



Add Hinge/Pin Support

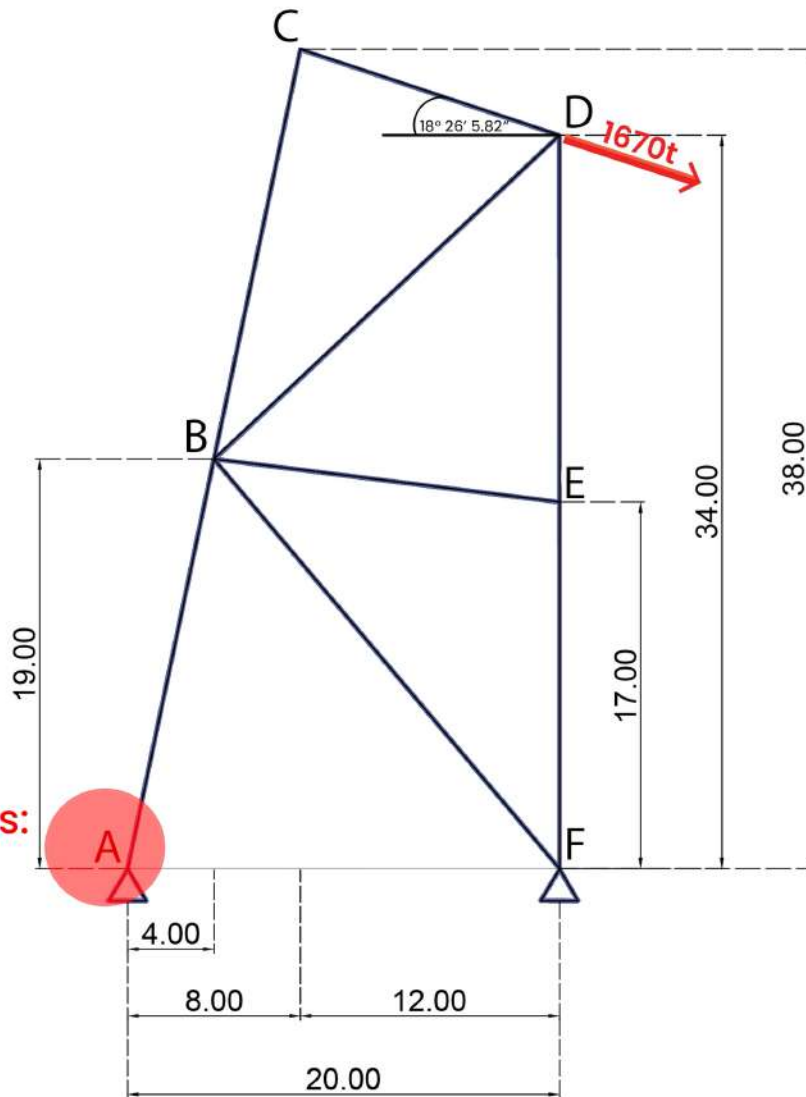


Add Load



Node 0 Added

UNDO



Coordenadas:

$X = 0$

$Y = 0$

Edit Node

X

0

Y

0

CANCEL

SAVE

Como observamos no está ubicada en $X=0$, $Y=0$ así que debemos editar las coordenadas como se encuentra el punto A

7

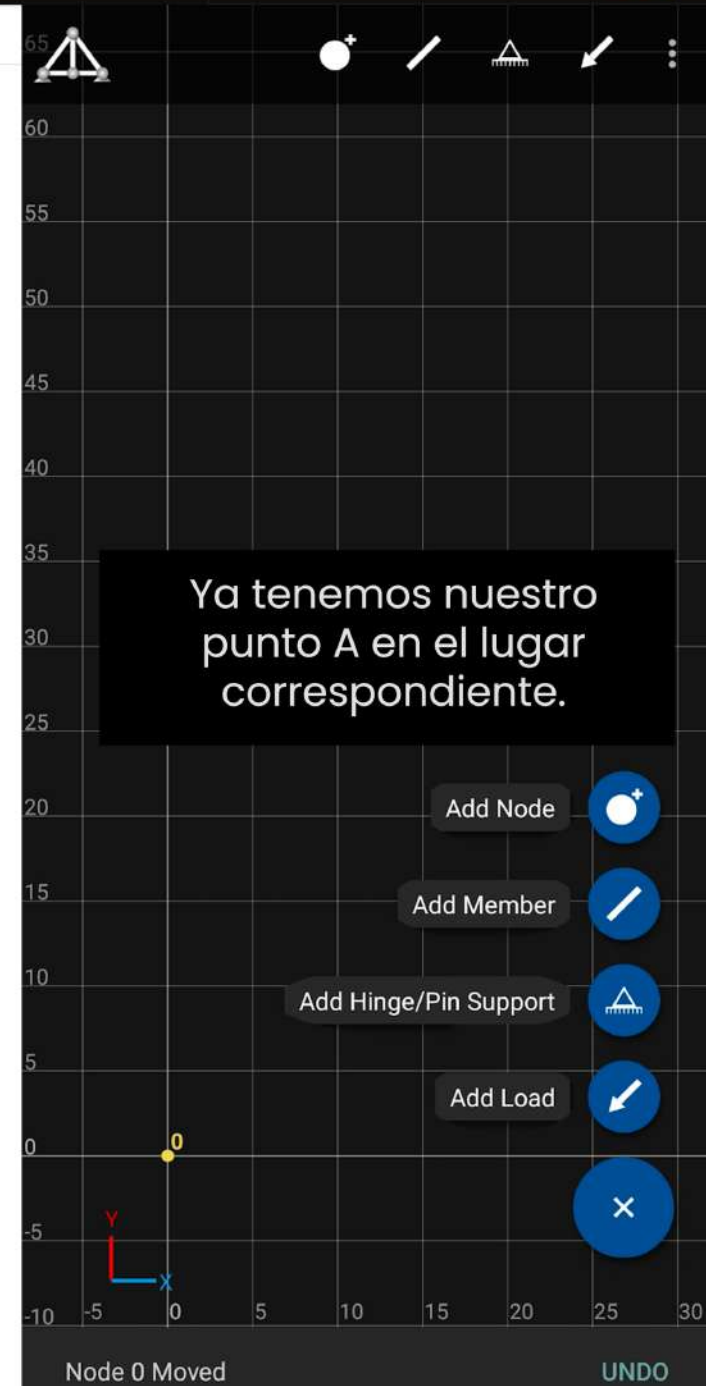
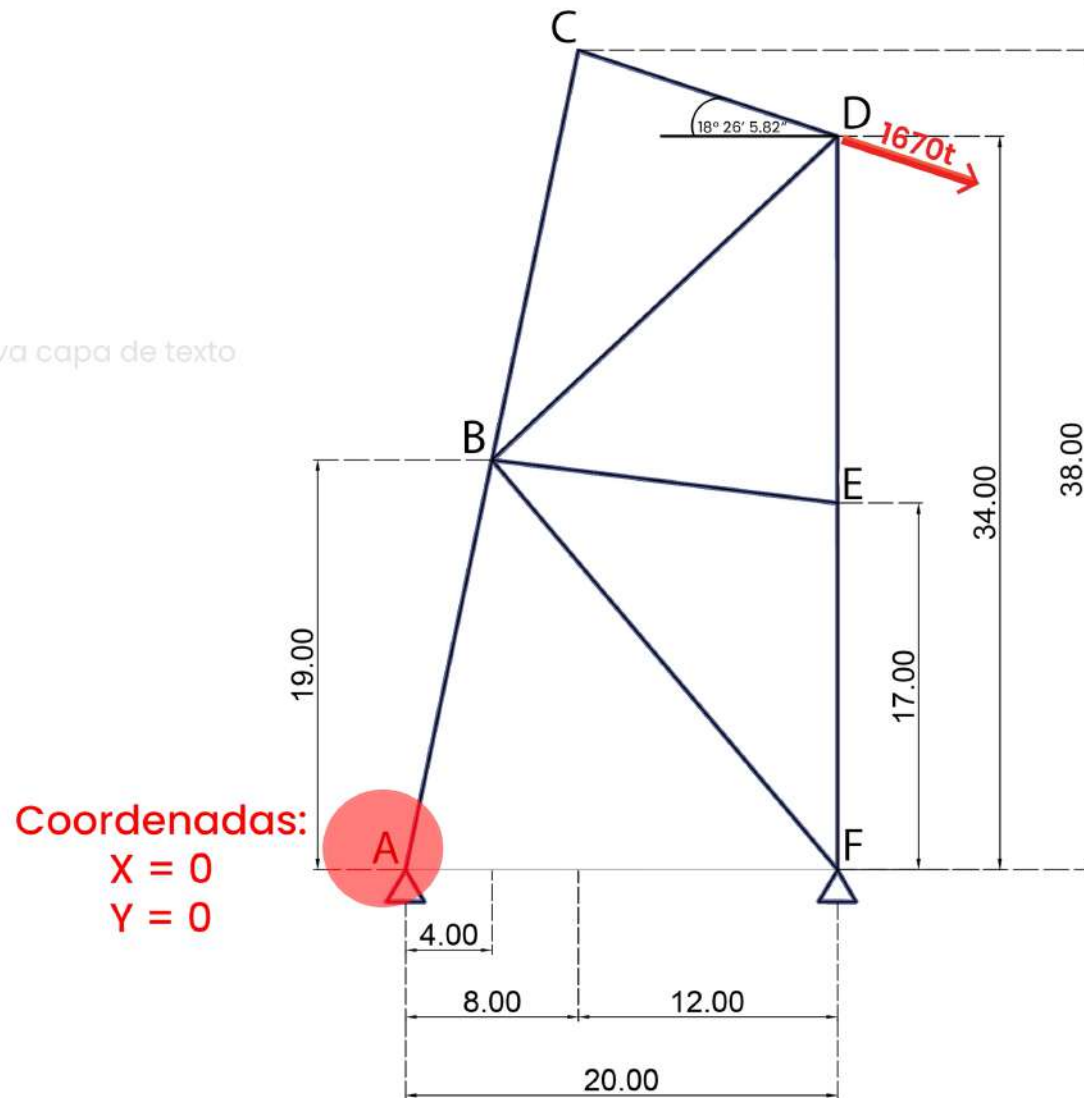
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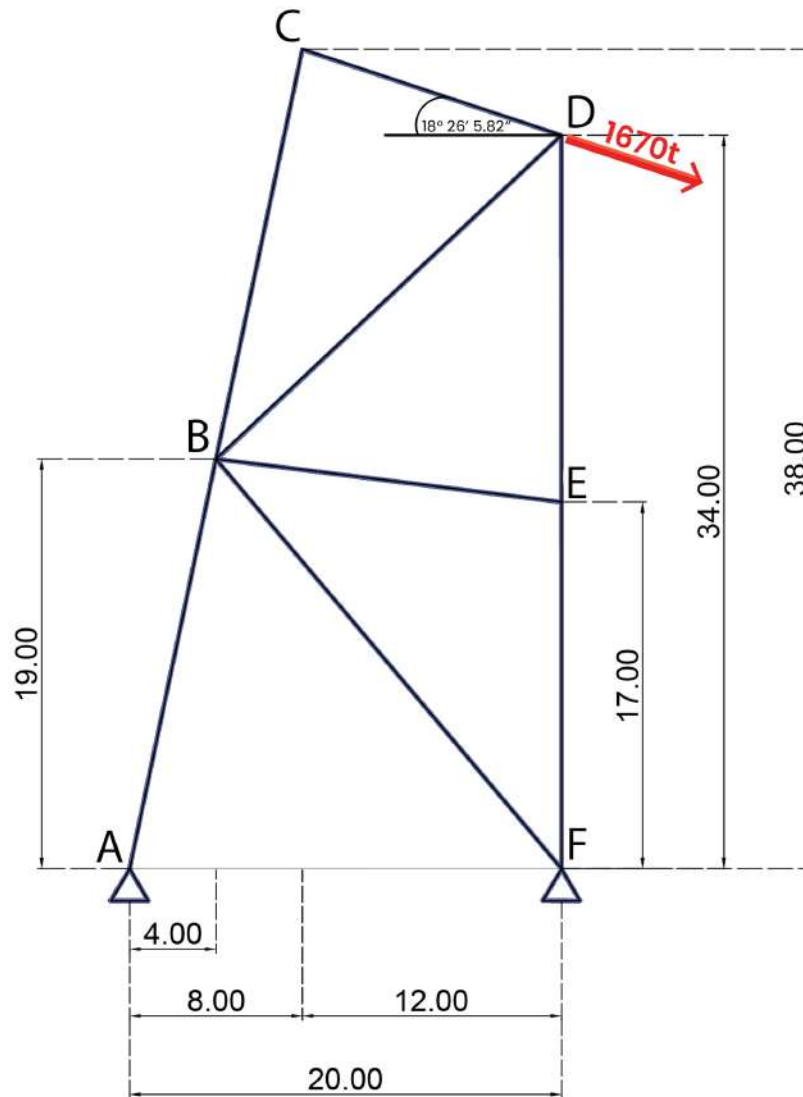
9

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0

,





Repetimos lo mismo para todos los puntos del apoyo según sus coord.

Add Node

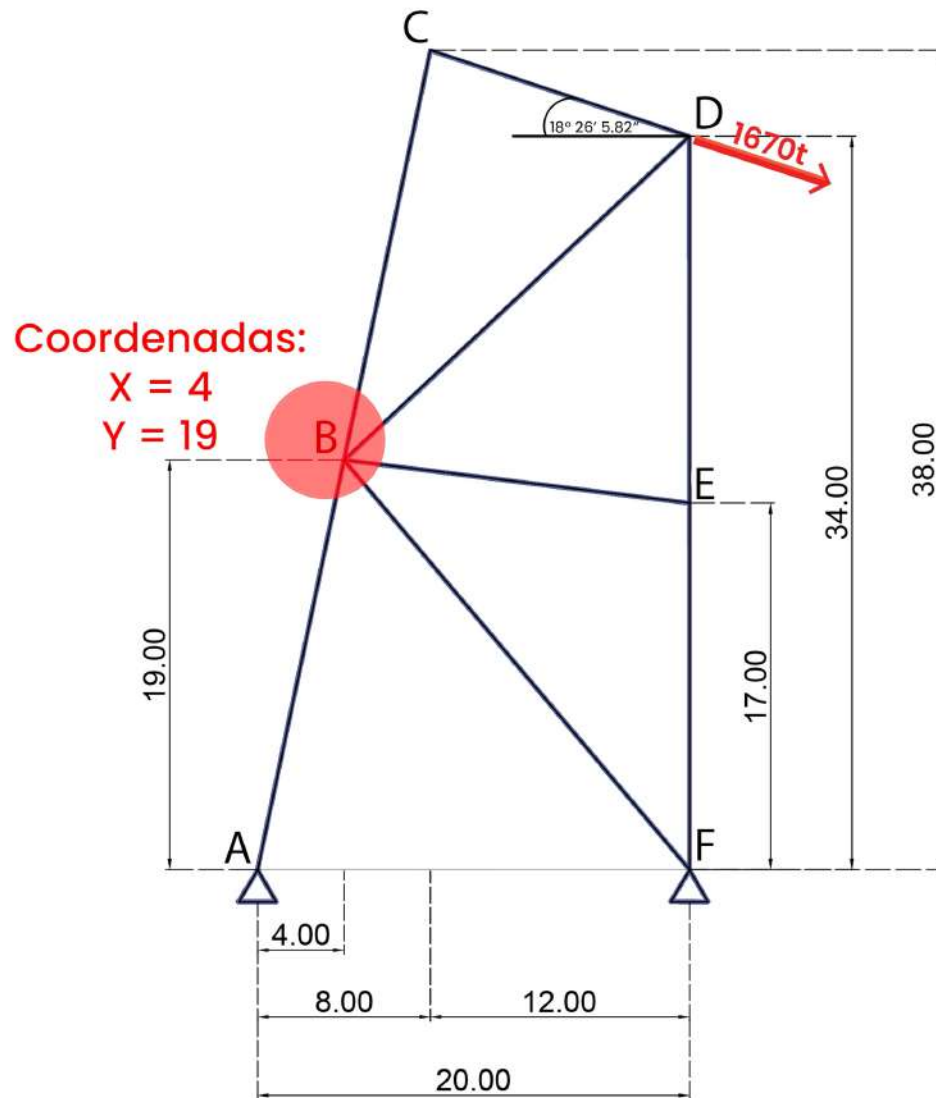
Add Member

Add Hinge/Pin Support

Add Load

X

Nueva capa de texto



Edit Node

X

4

Y

19

CANCEL

SAVE

1

2

3

✕

4

5

6

Realiz.

7

8

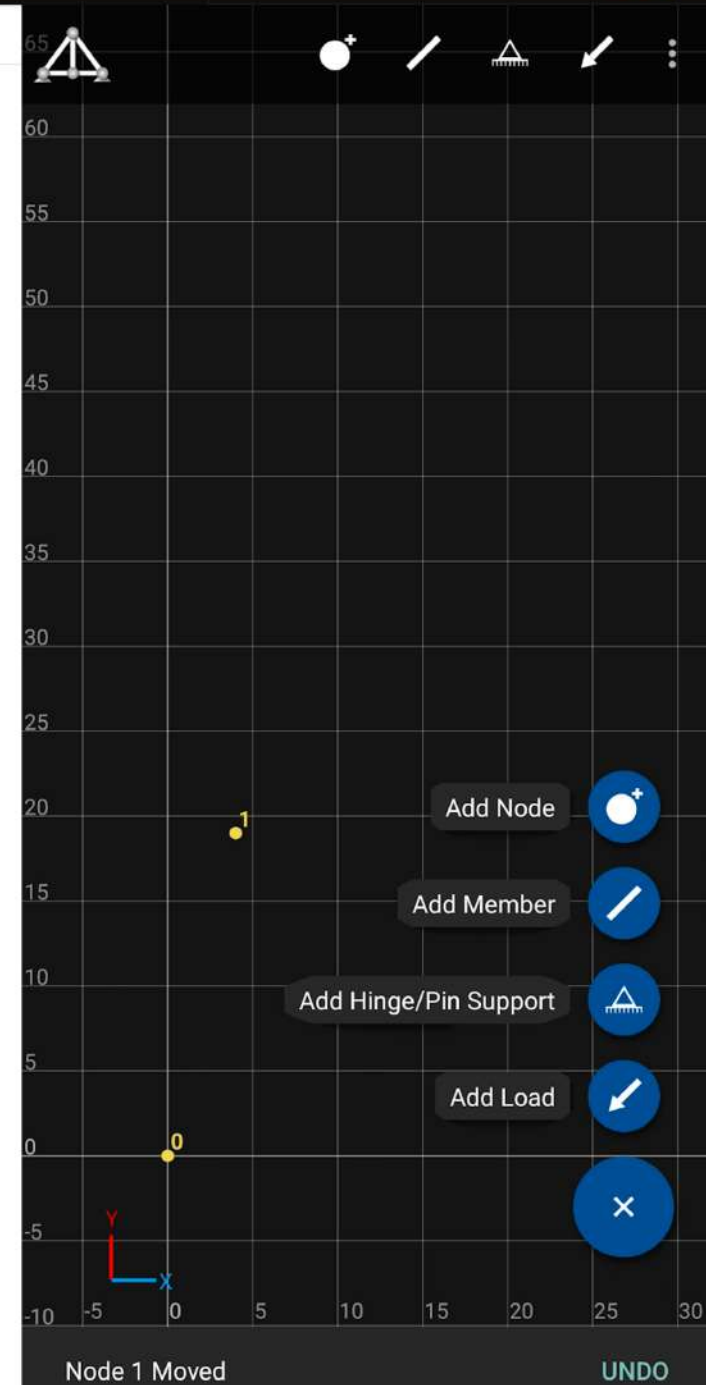
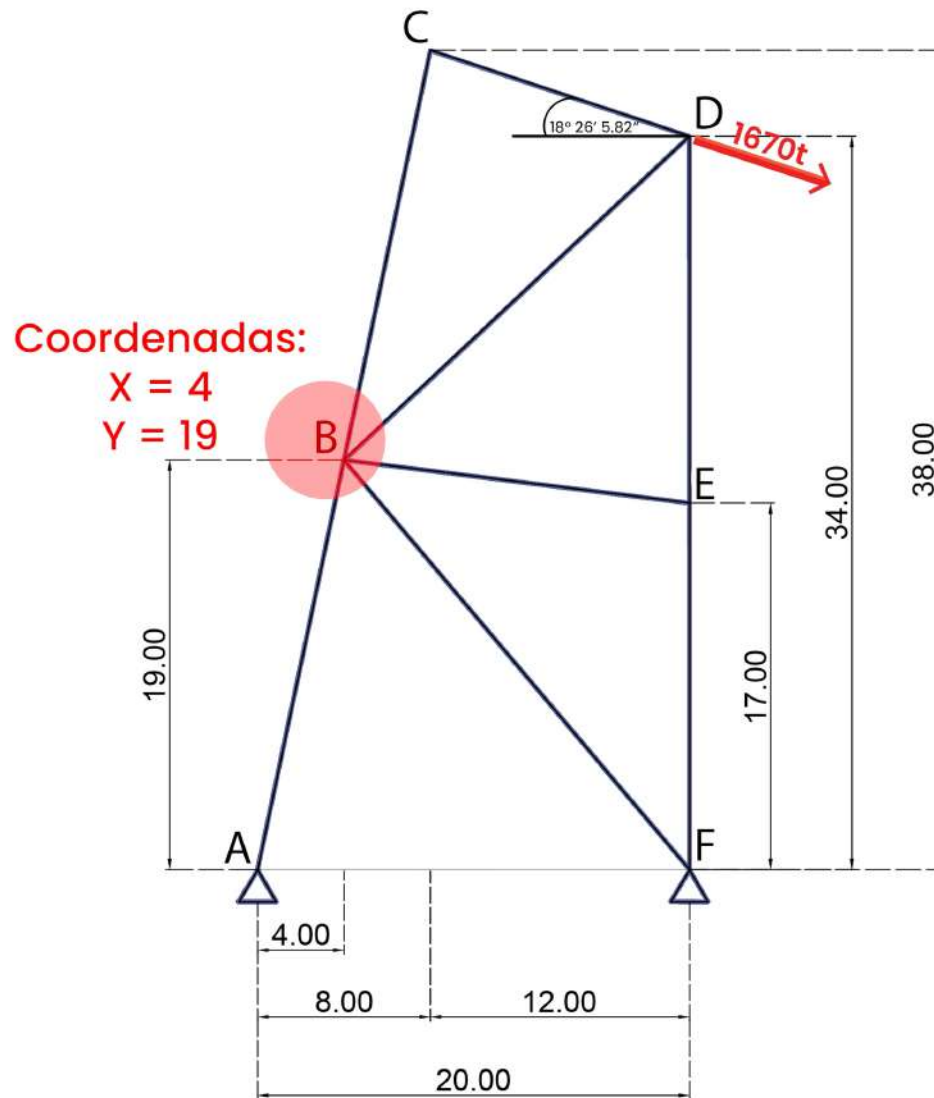
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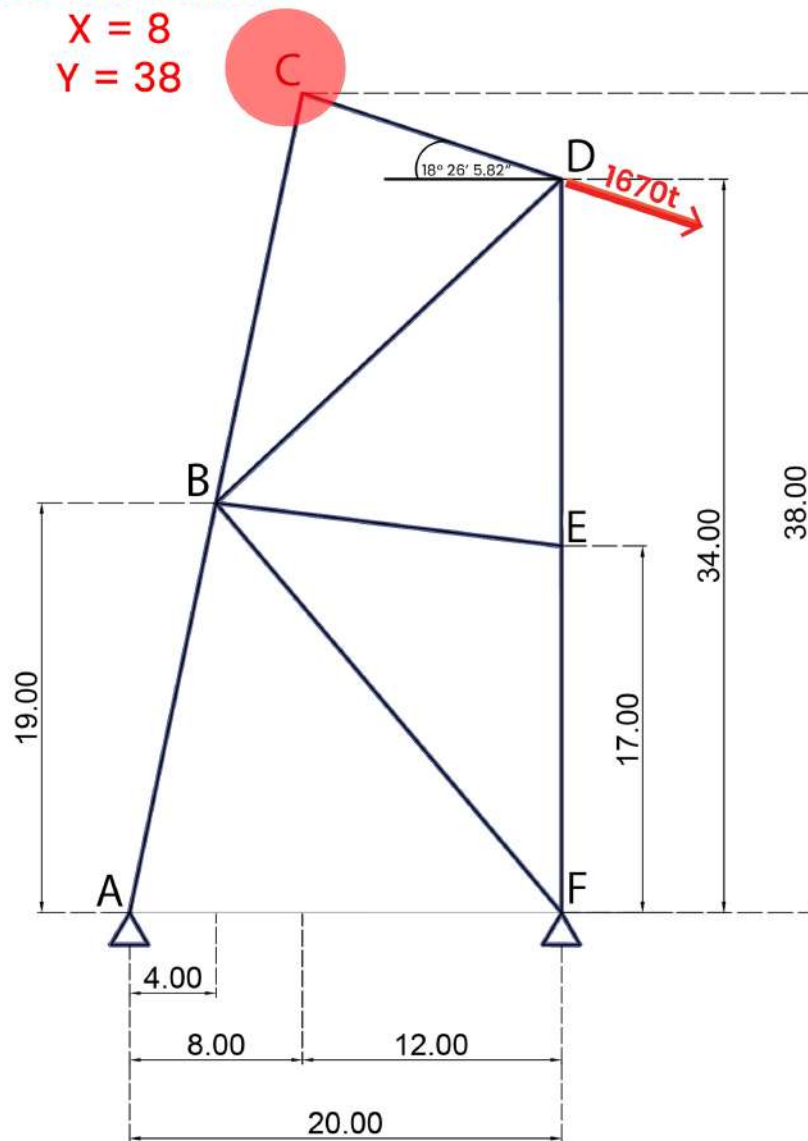
0

,

Nueva capa de texto



Coordenadas:

 $X = 8$ $Y = 38$ 

Edit Node

X

8

Y

38

CANCEL

SAVE

1

2

3

4

5

6

Realiz.

7

8

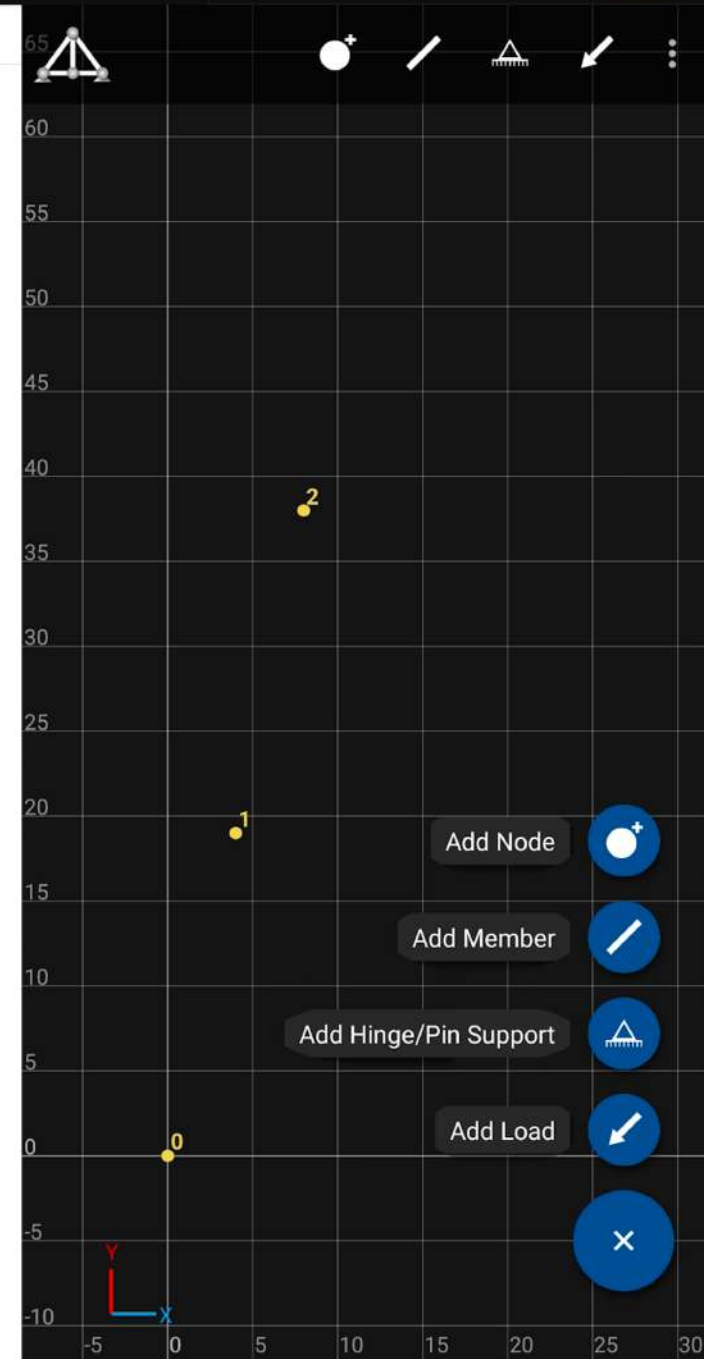
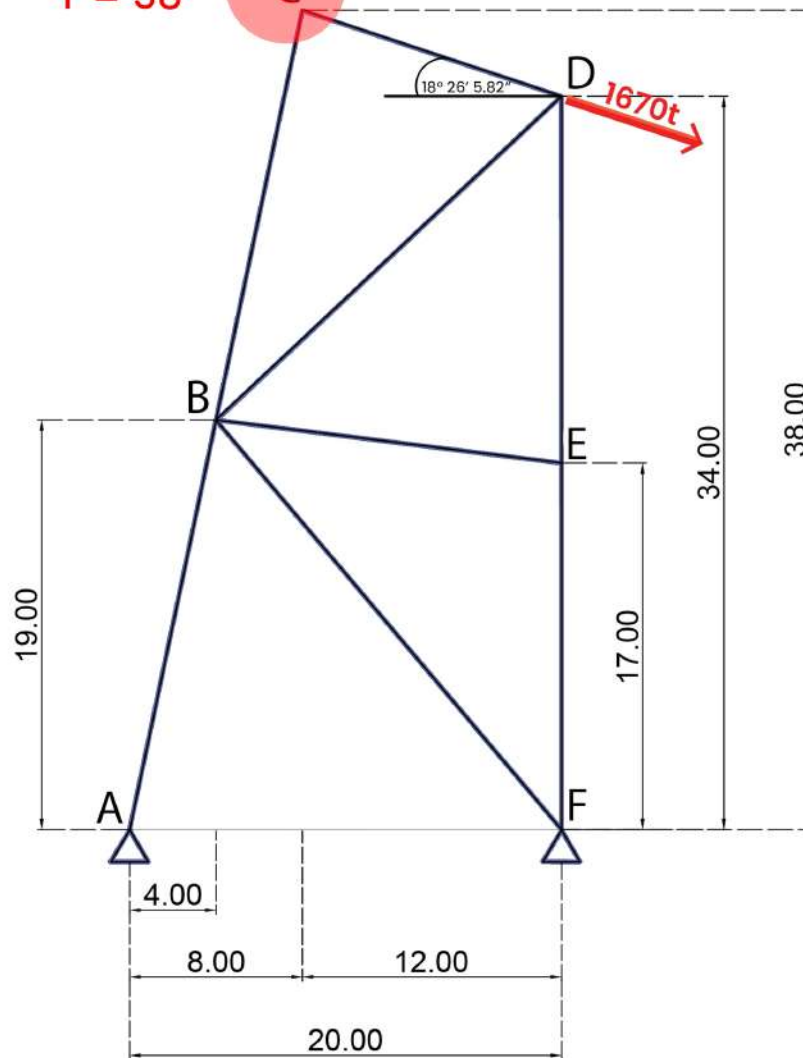
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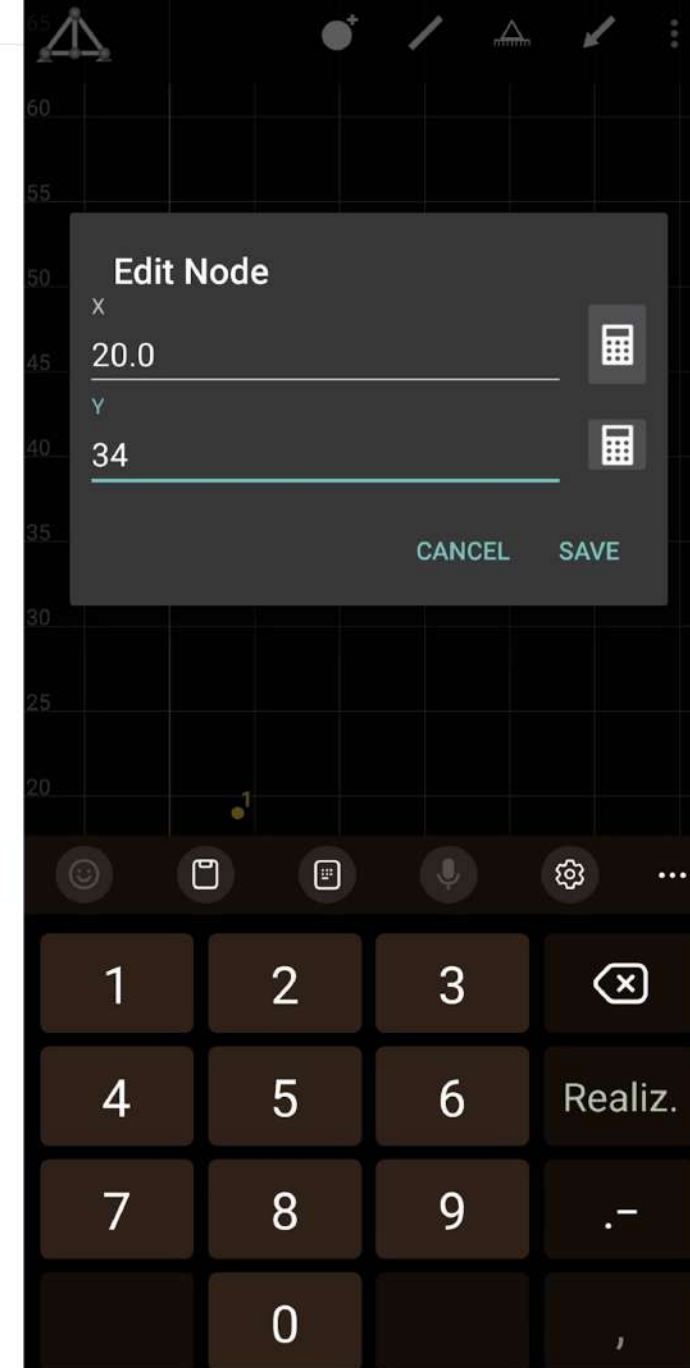
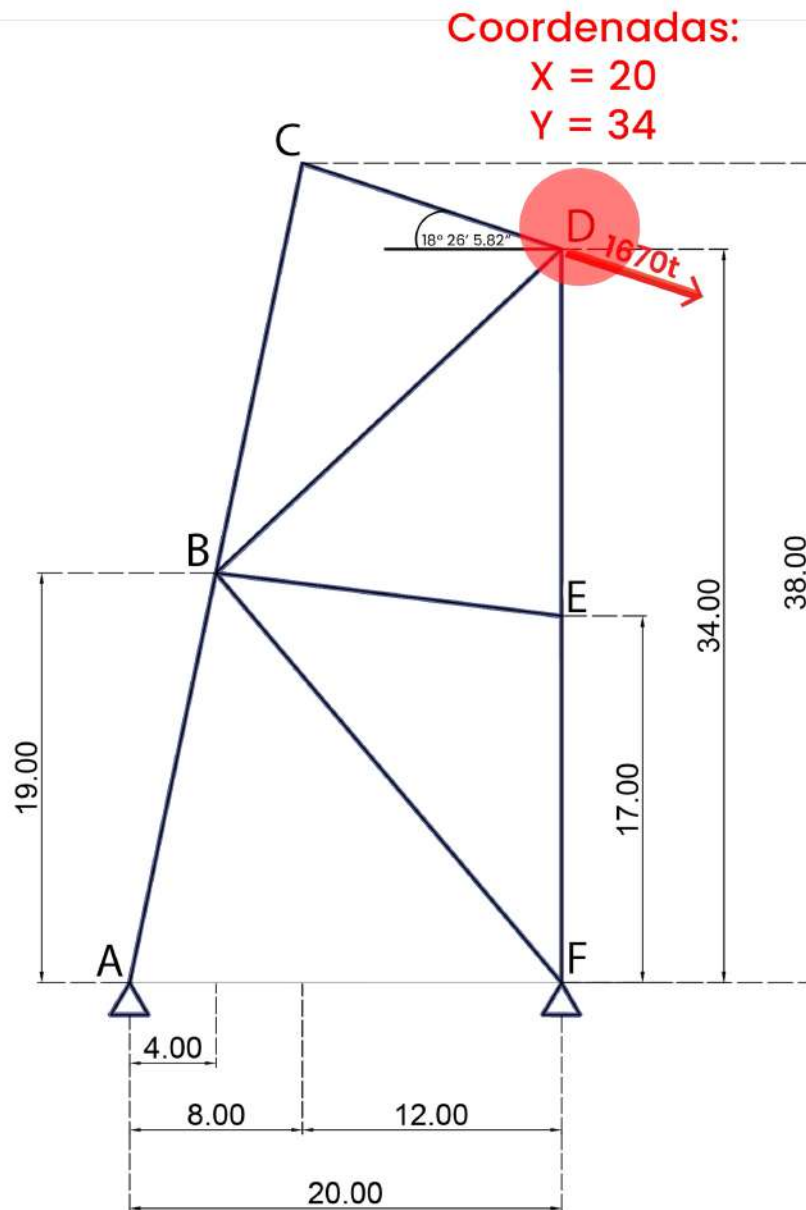
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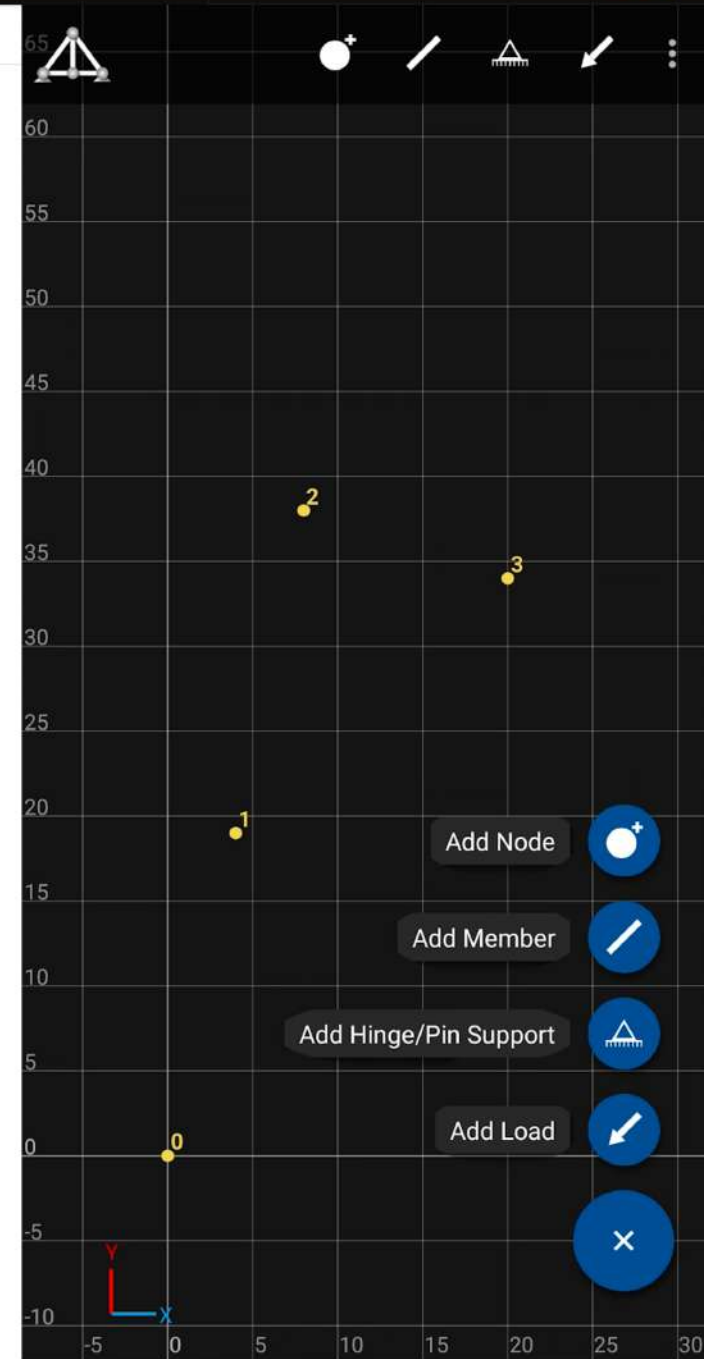
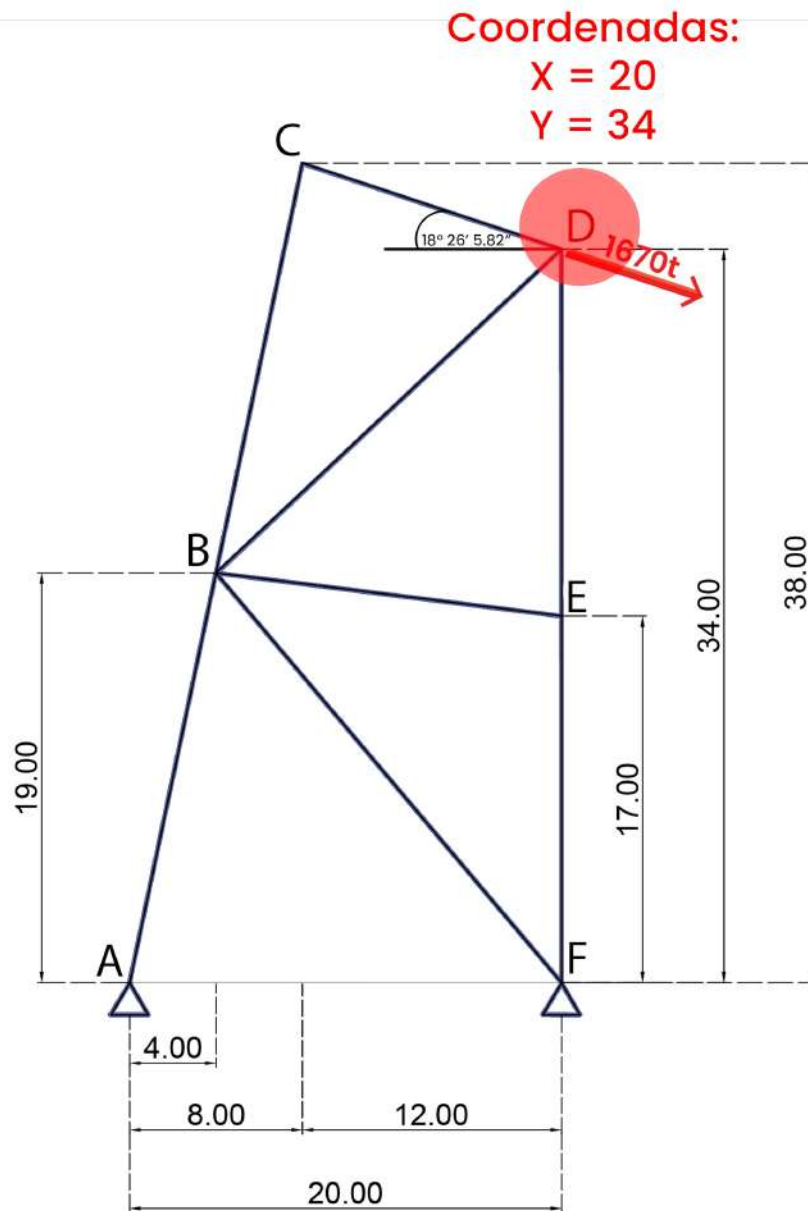
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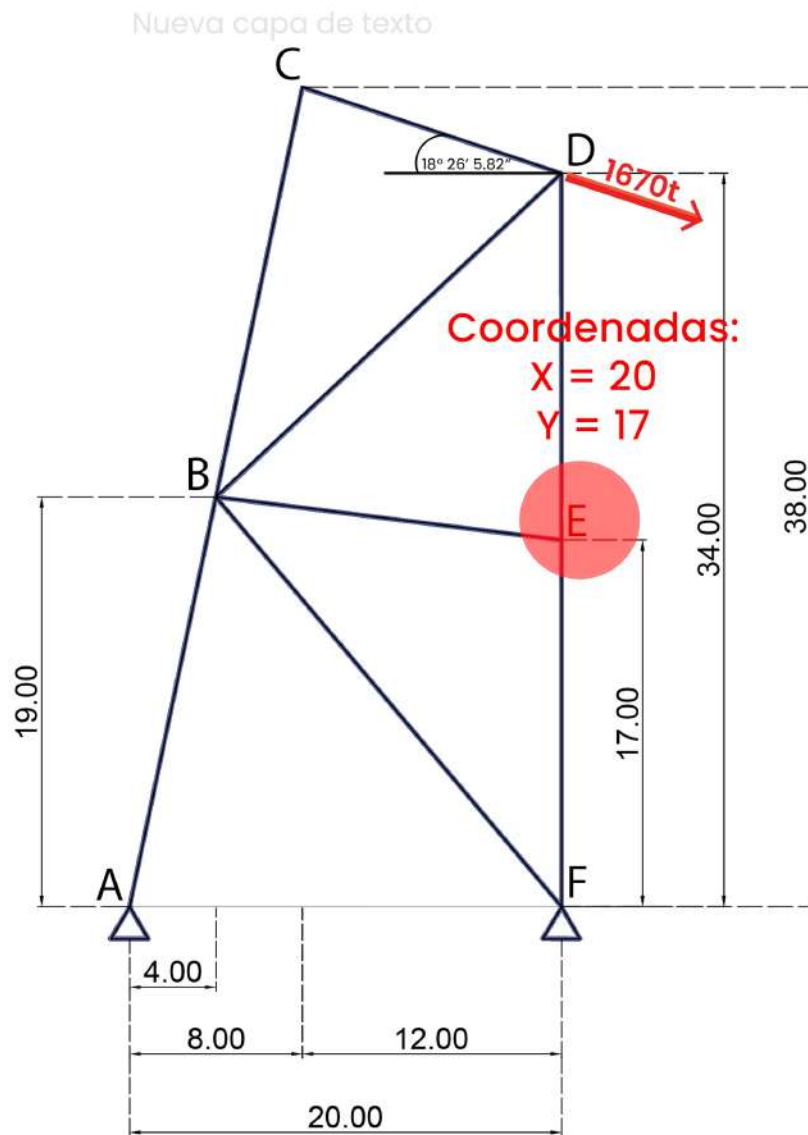
,

Coordenadas:

 $X = 8$ $Y = 38$ 







Edit Node

X

20.0



Y

17



CANCEL

SAVE



1

2

3



4

5

6

Realiz.

7

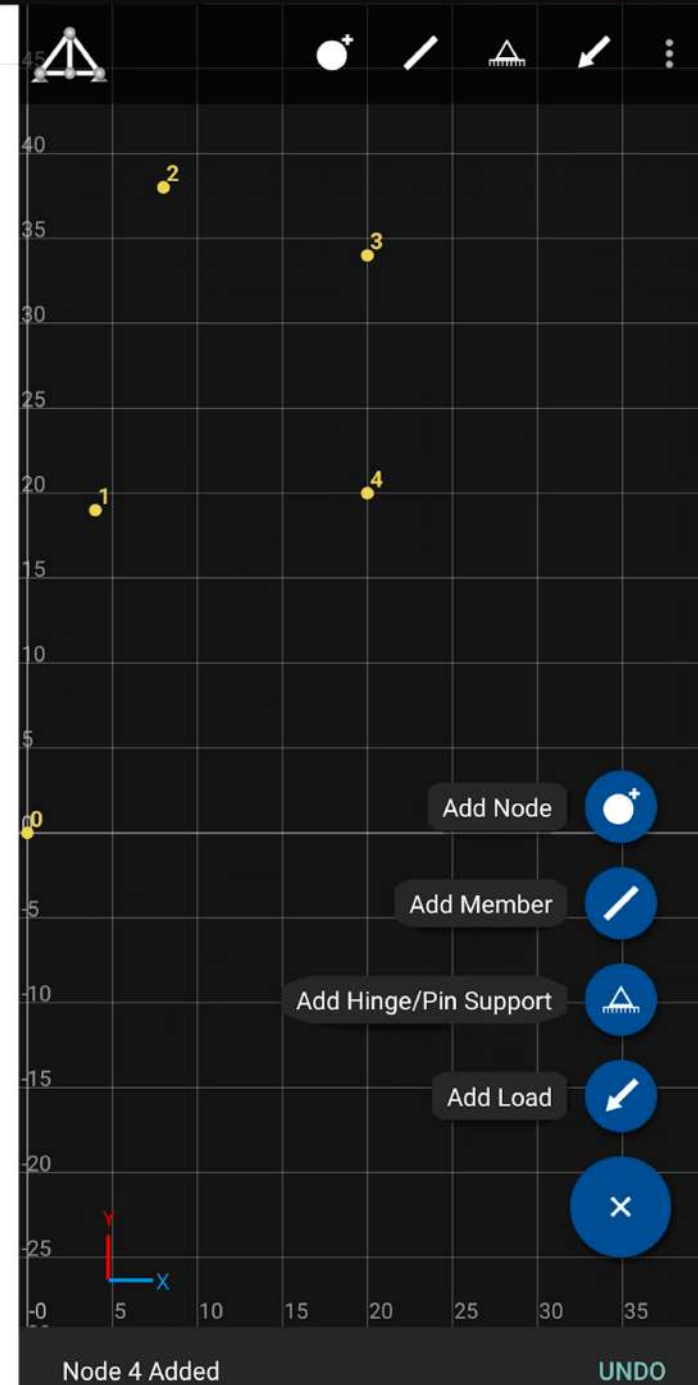
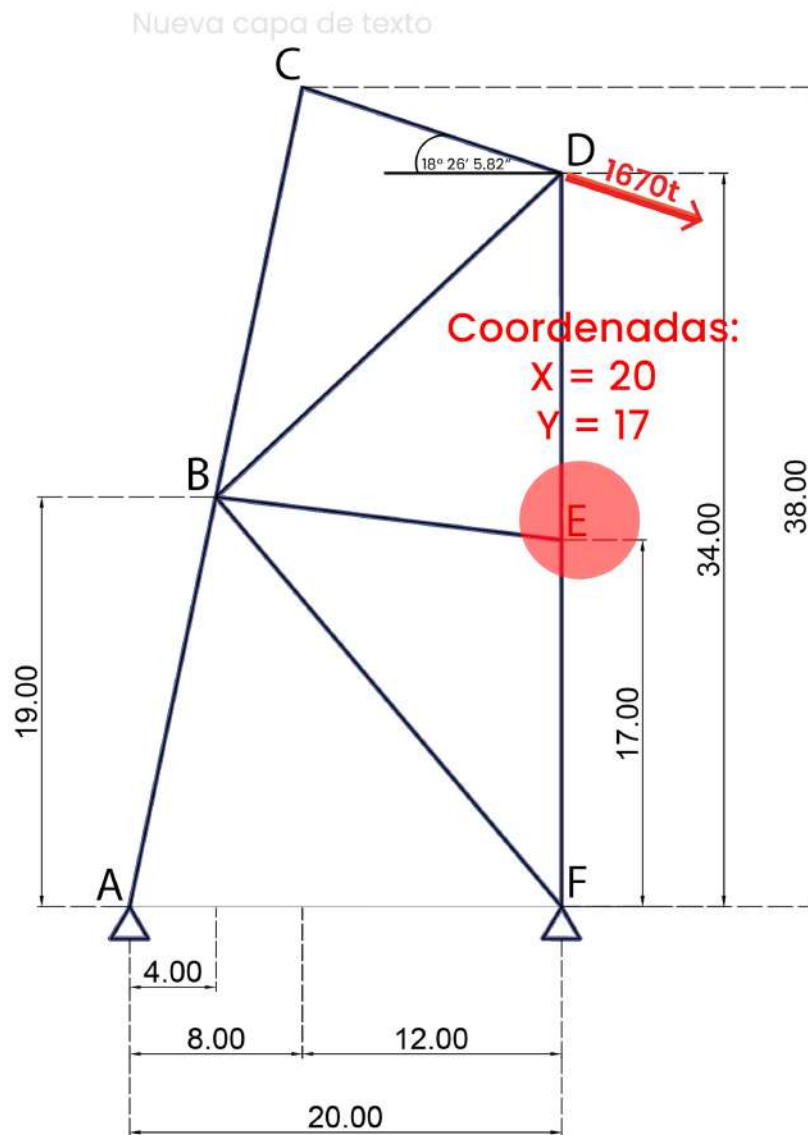
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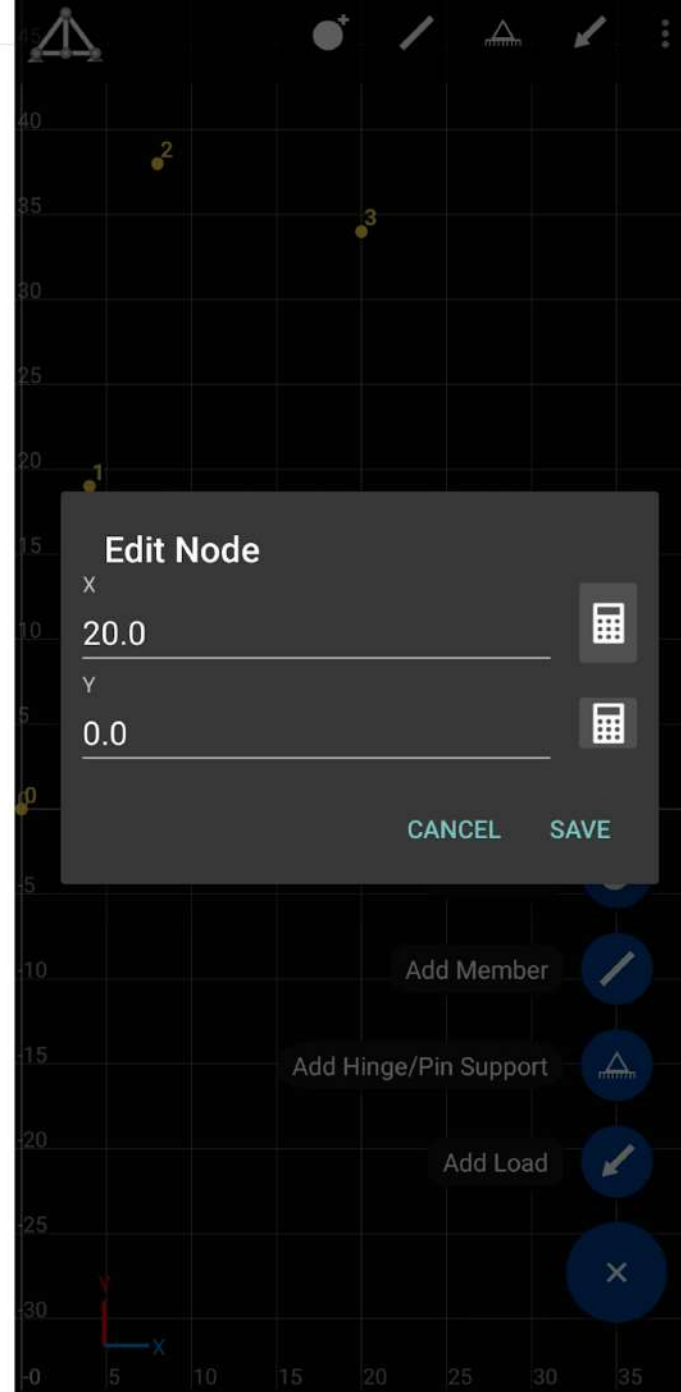
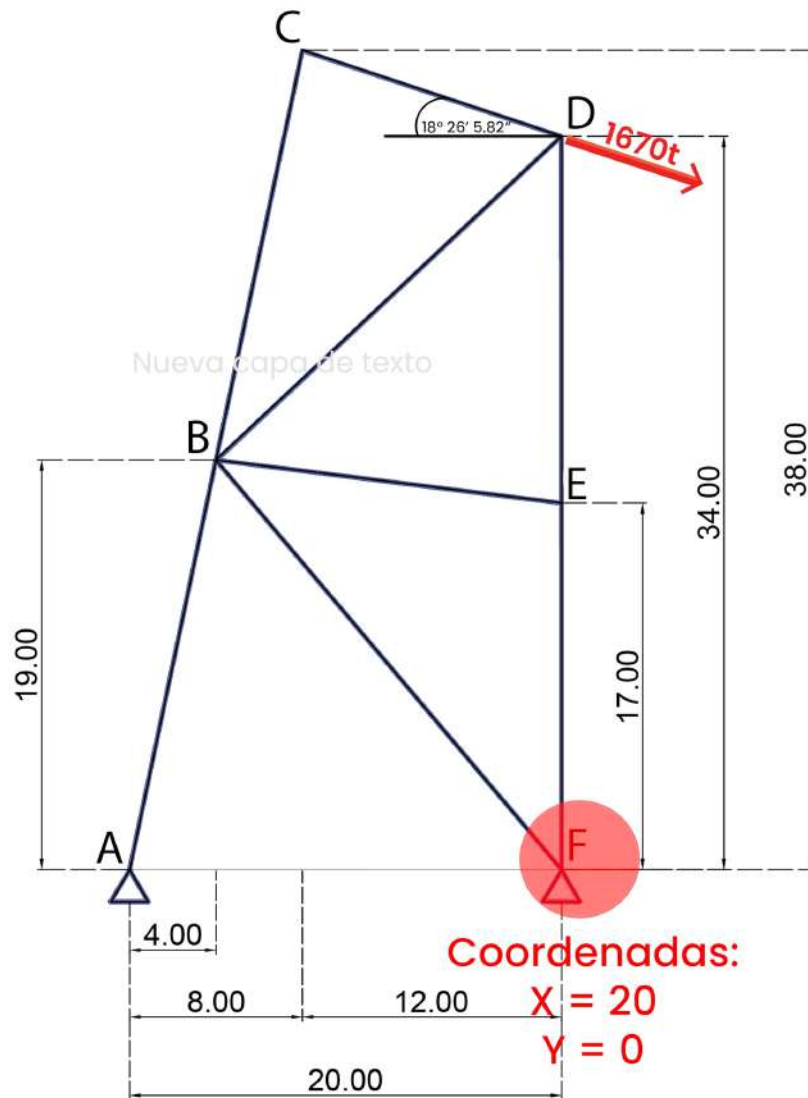
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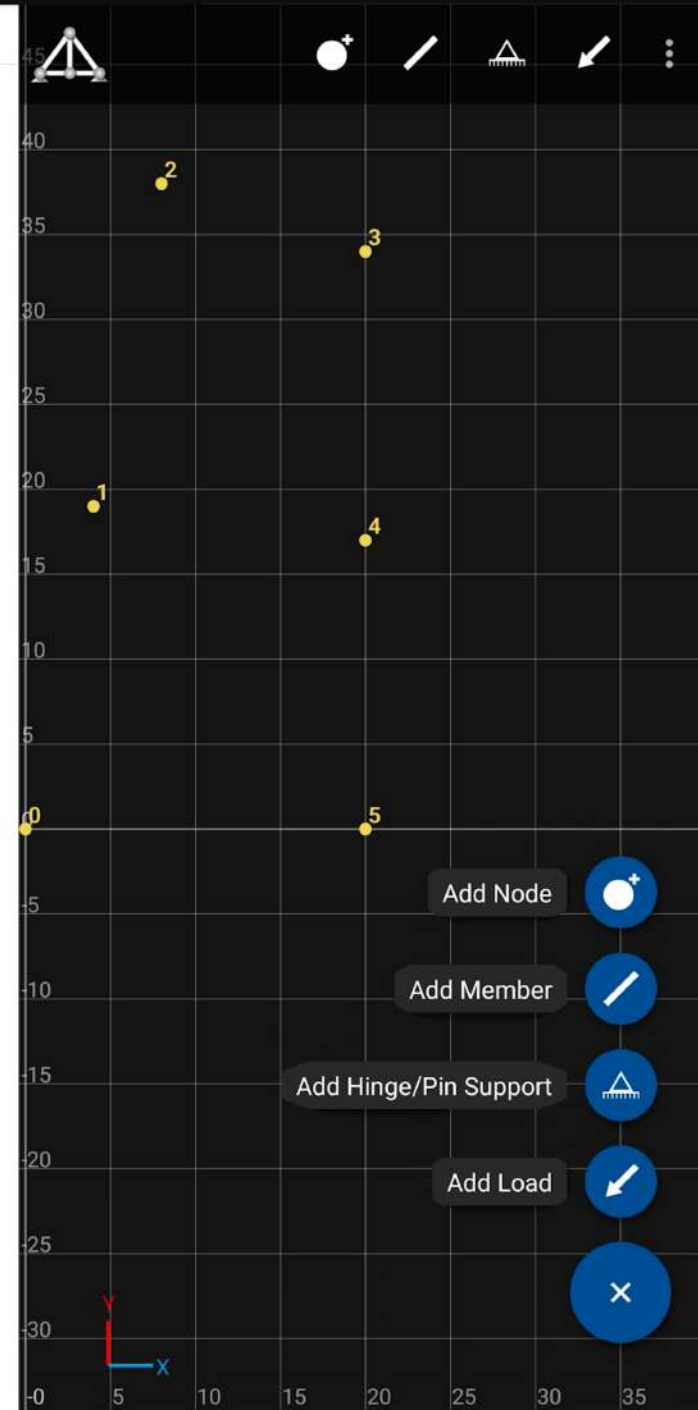
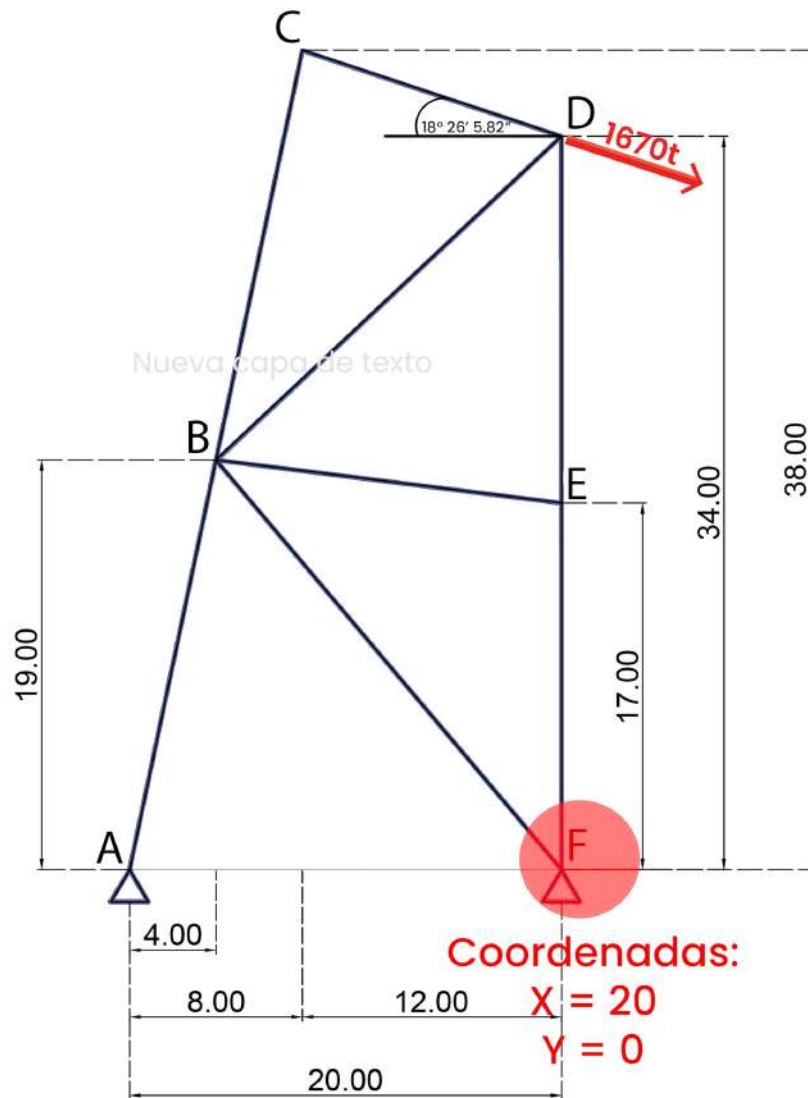
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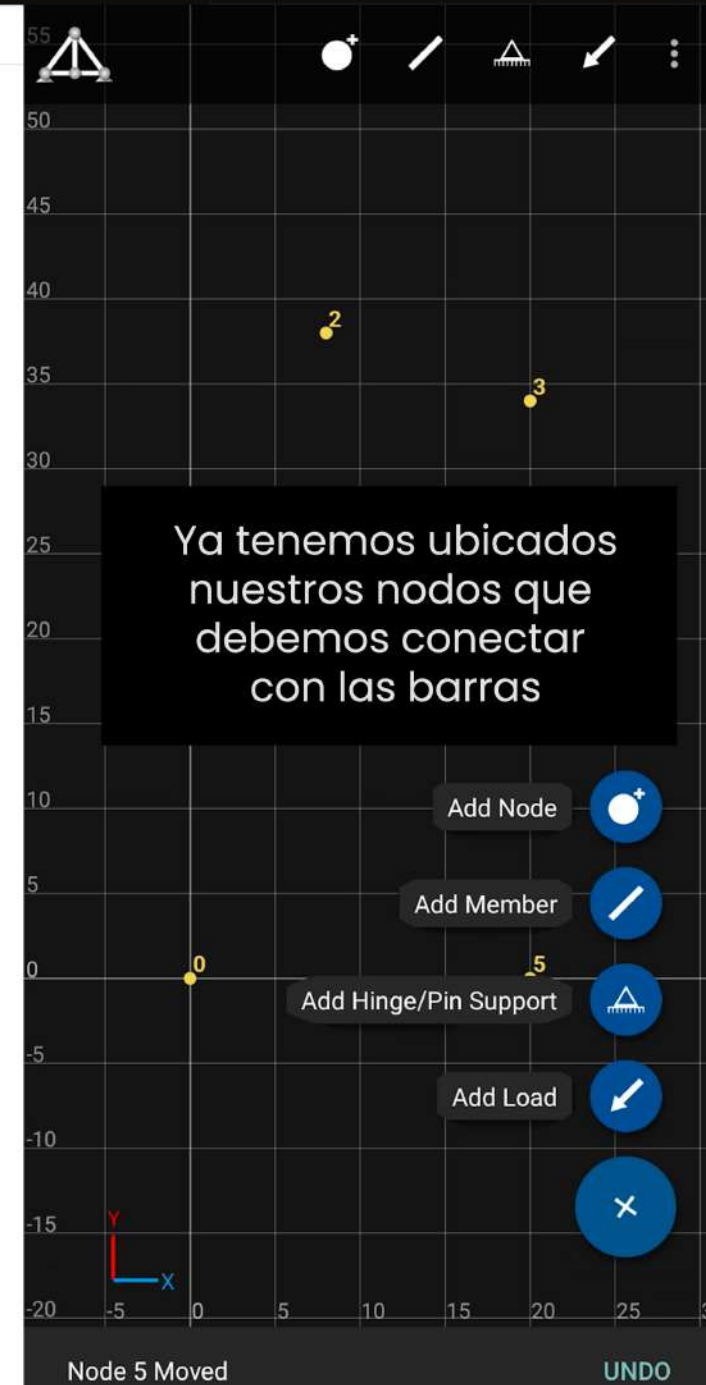
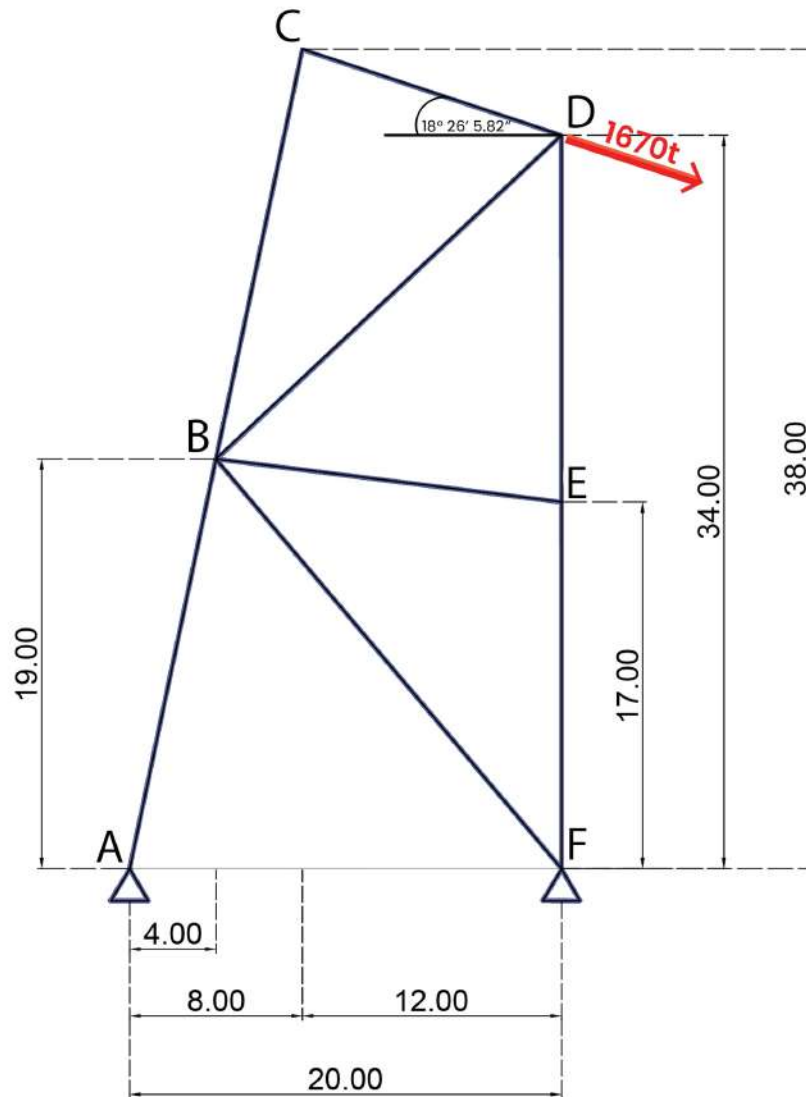
0

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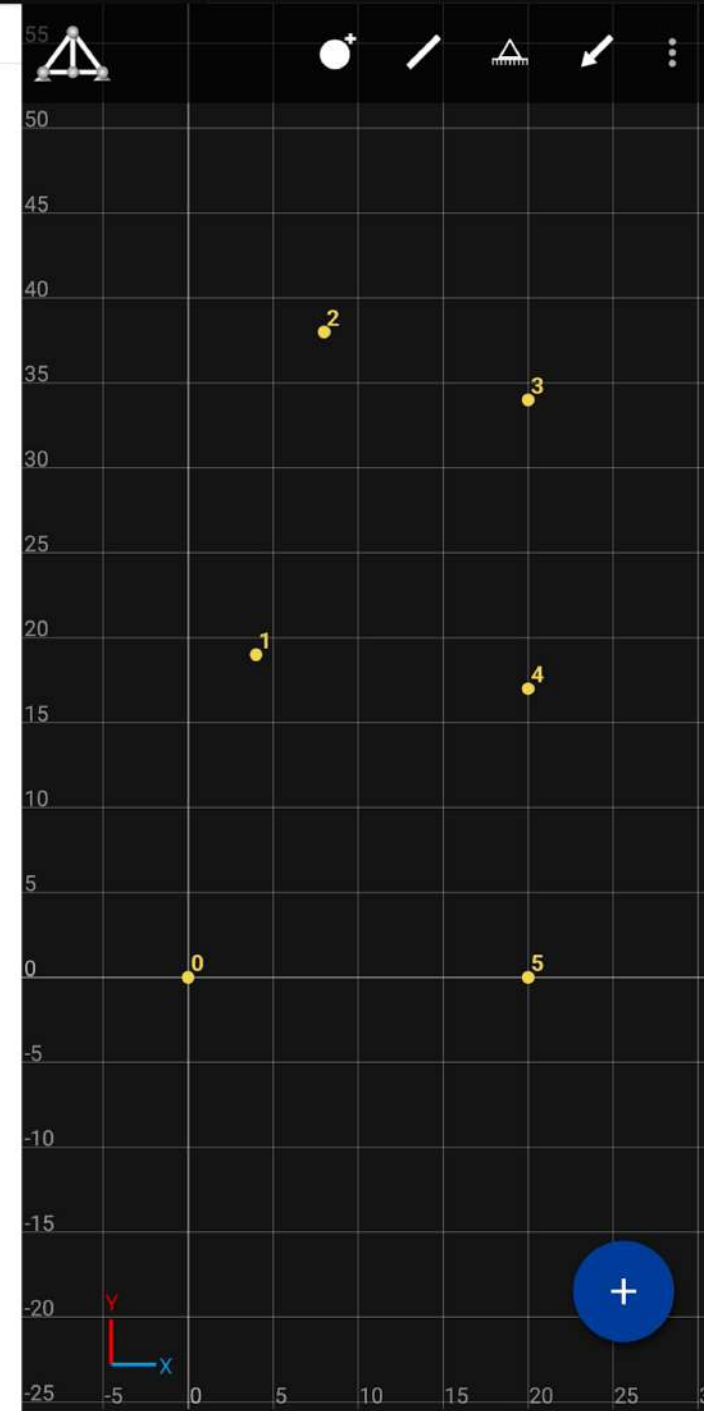
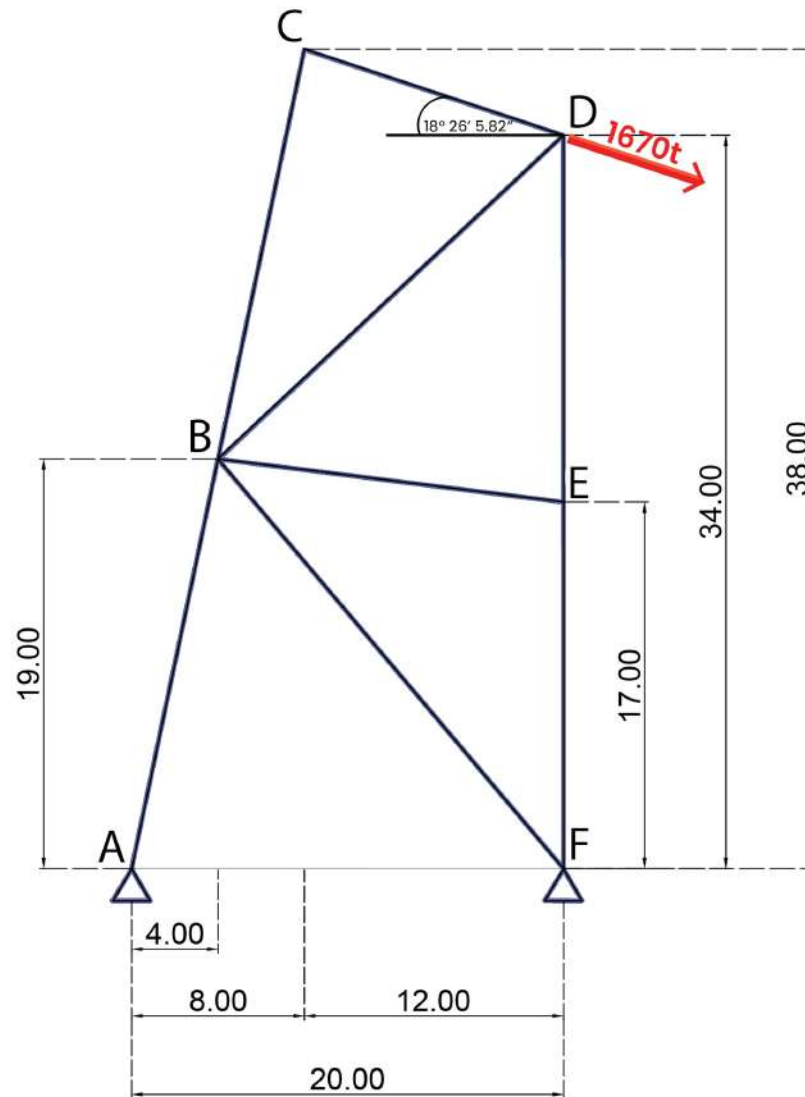


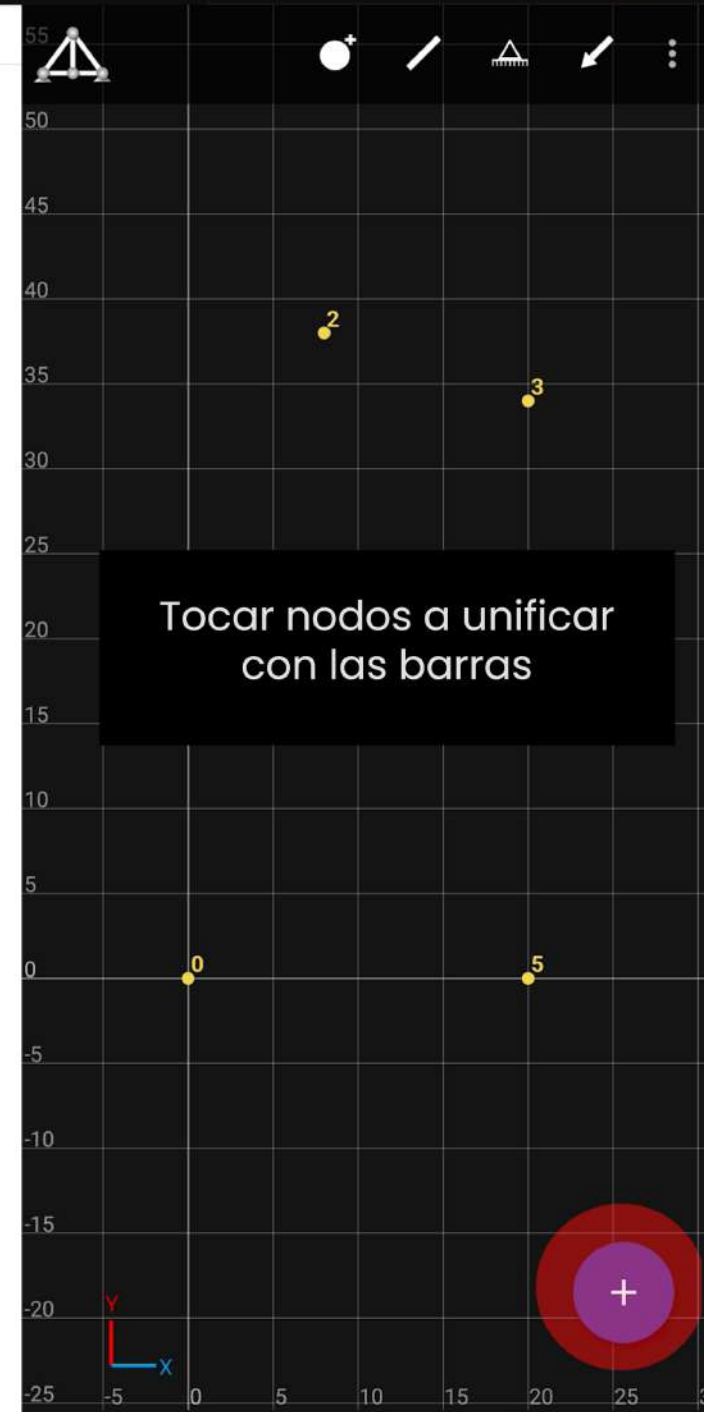
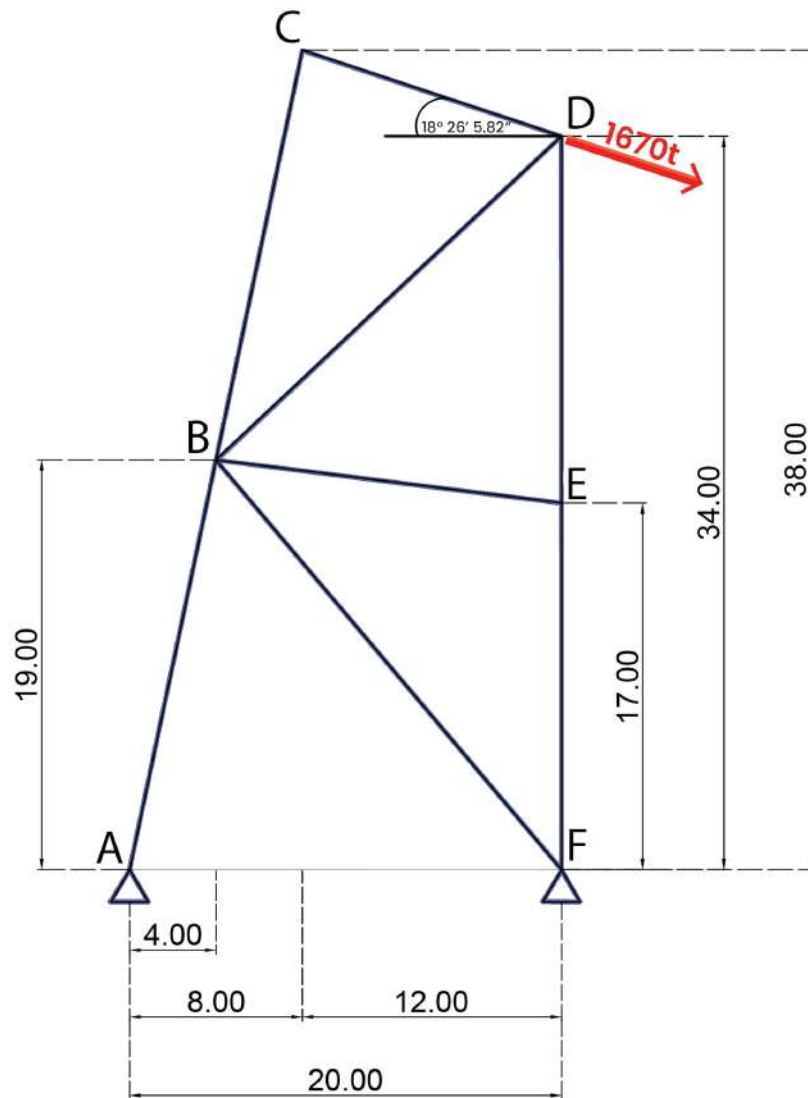


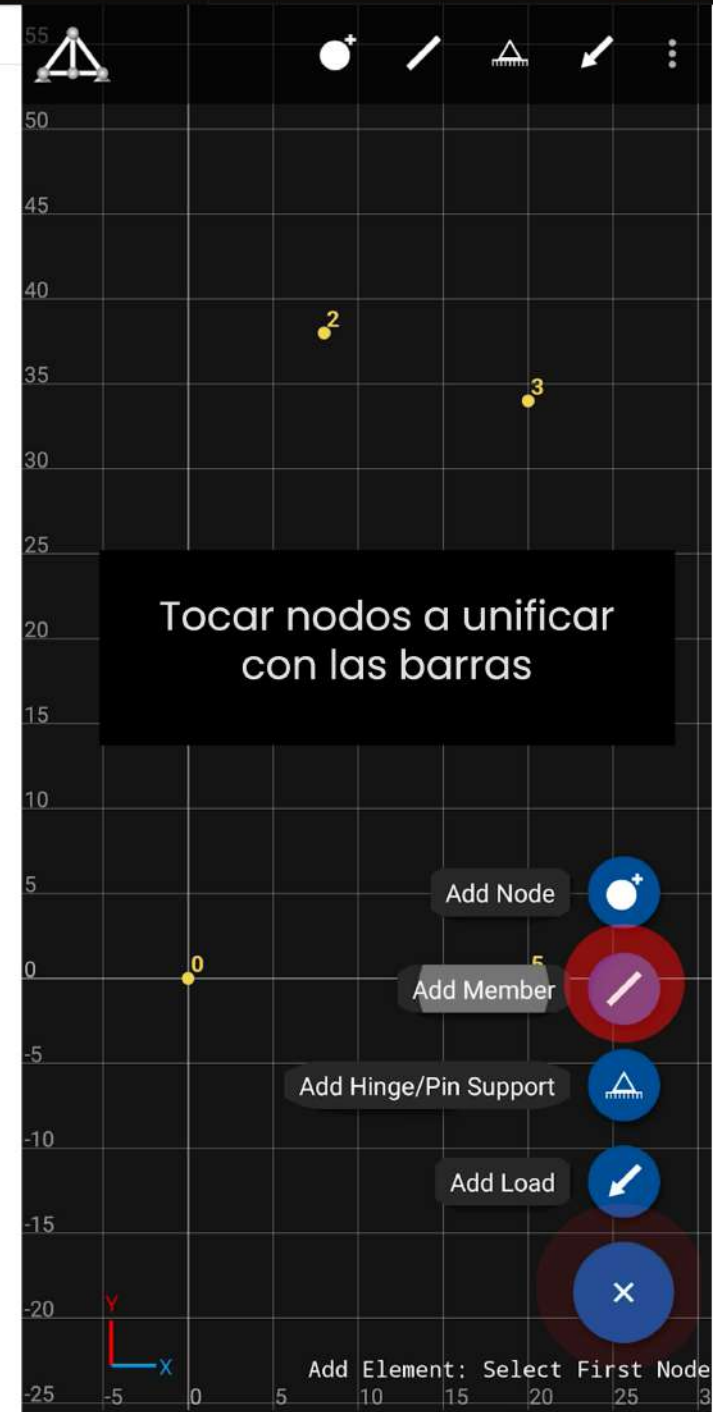
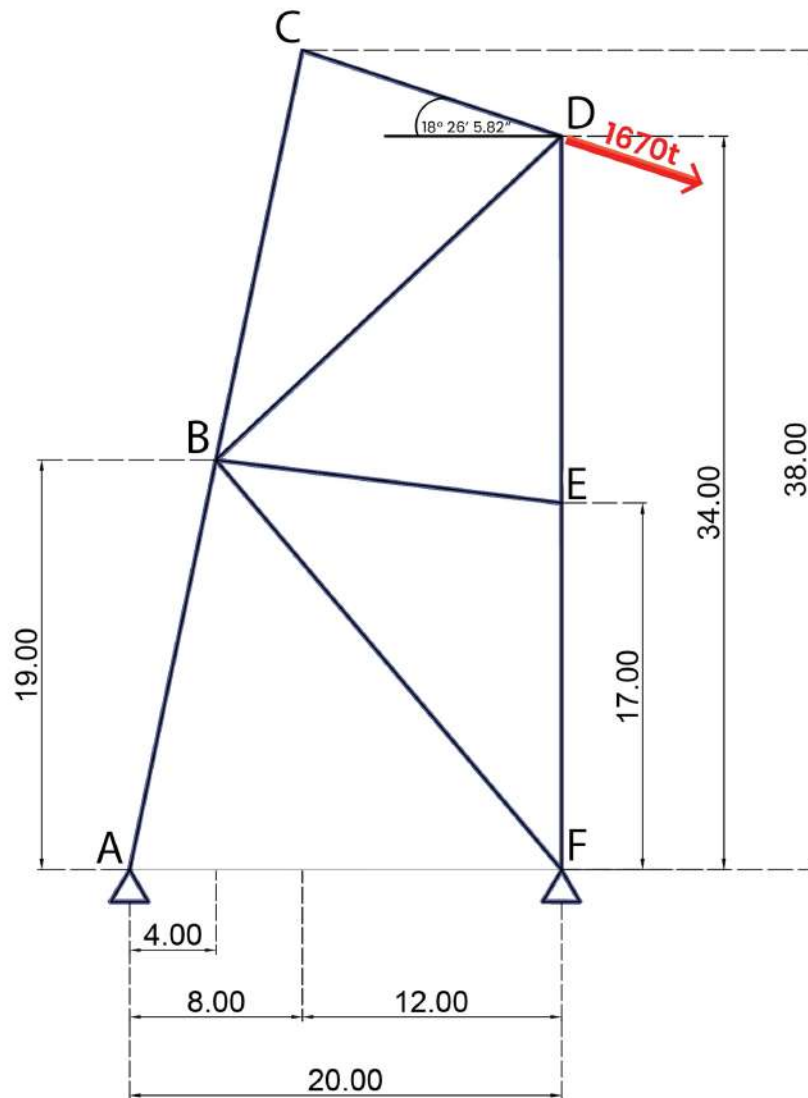
Ya tenemos ubicados nuestros nodos que debemos conectar con las barras

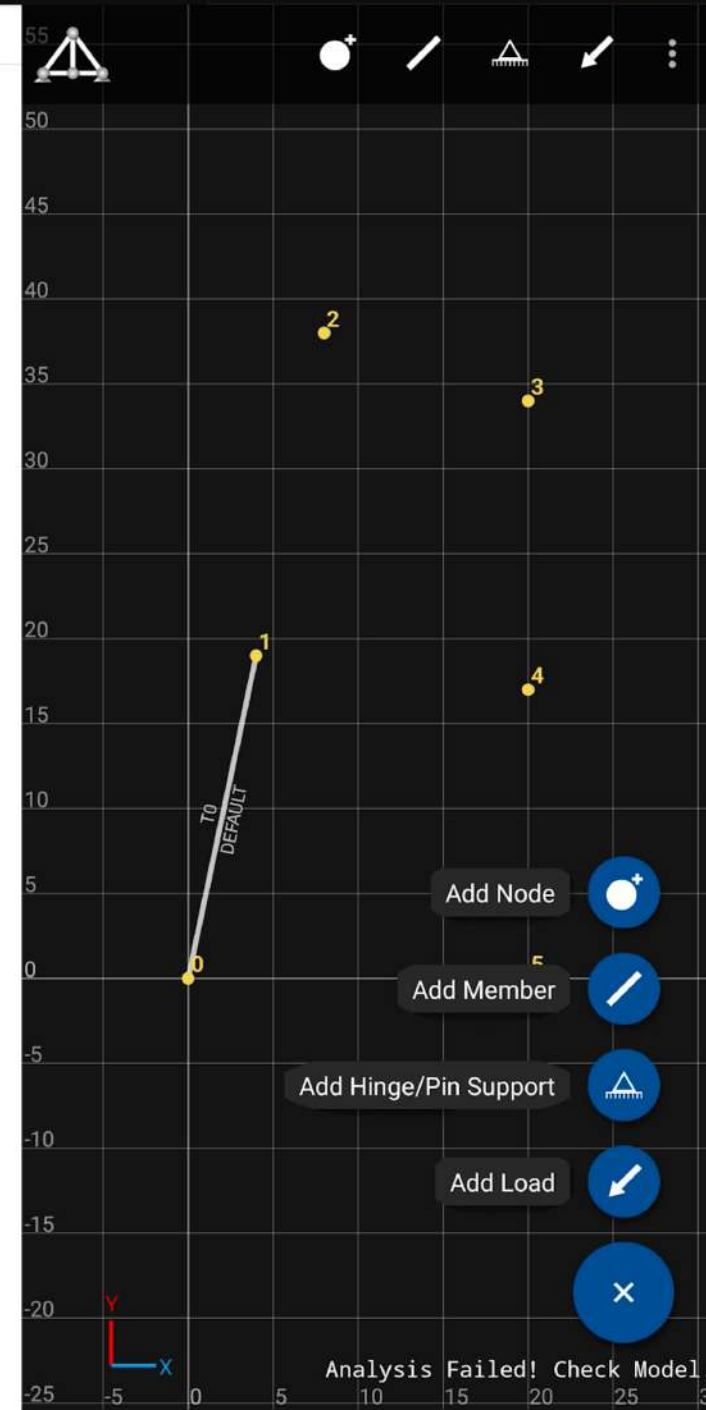
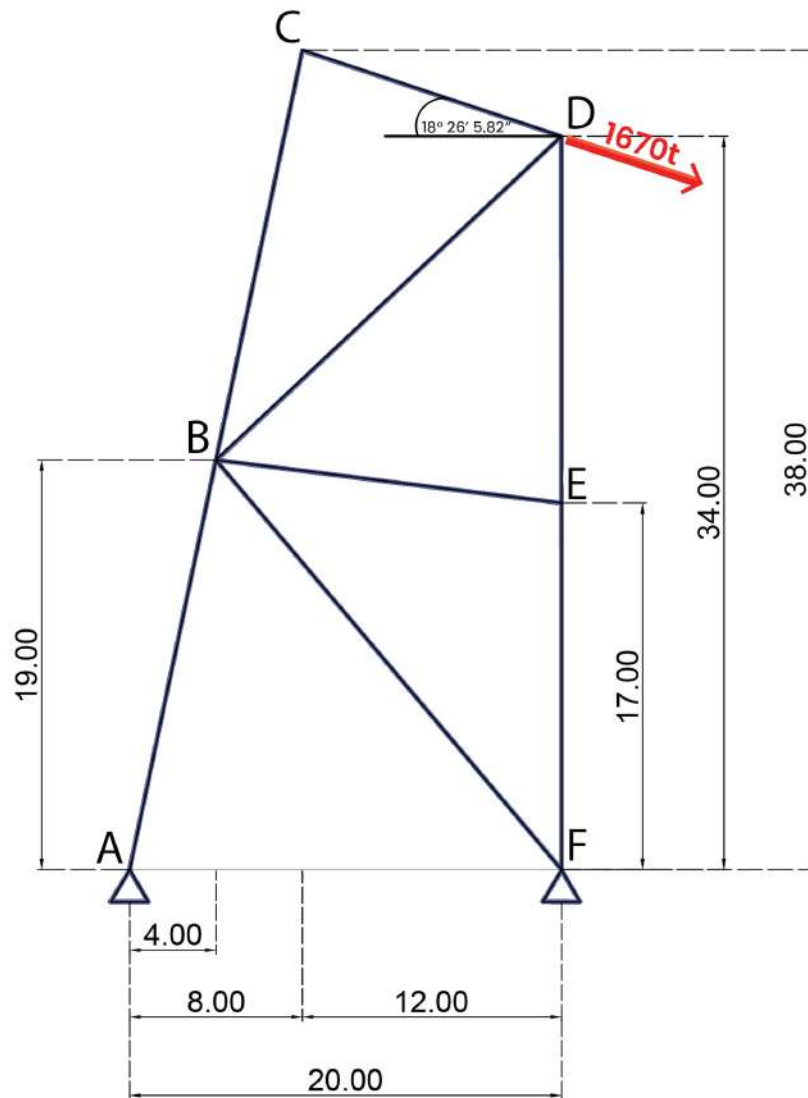
Node 5 Moved

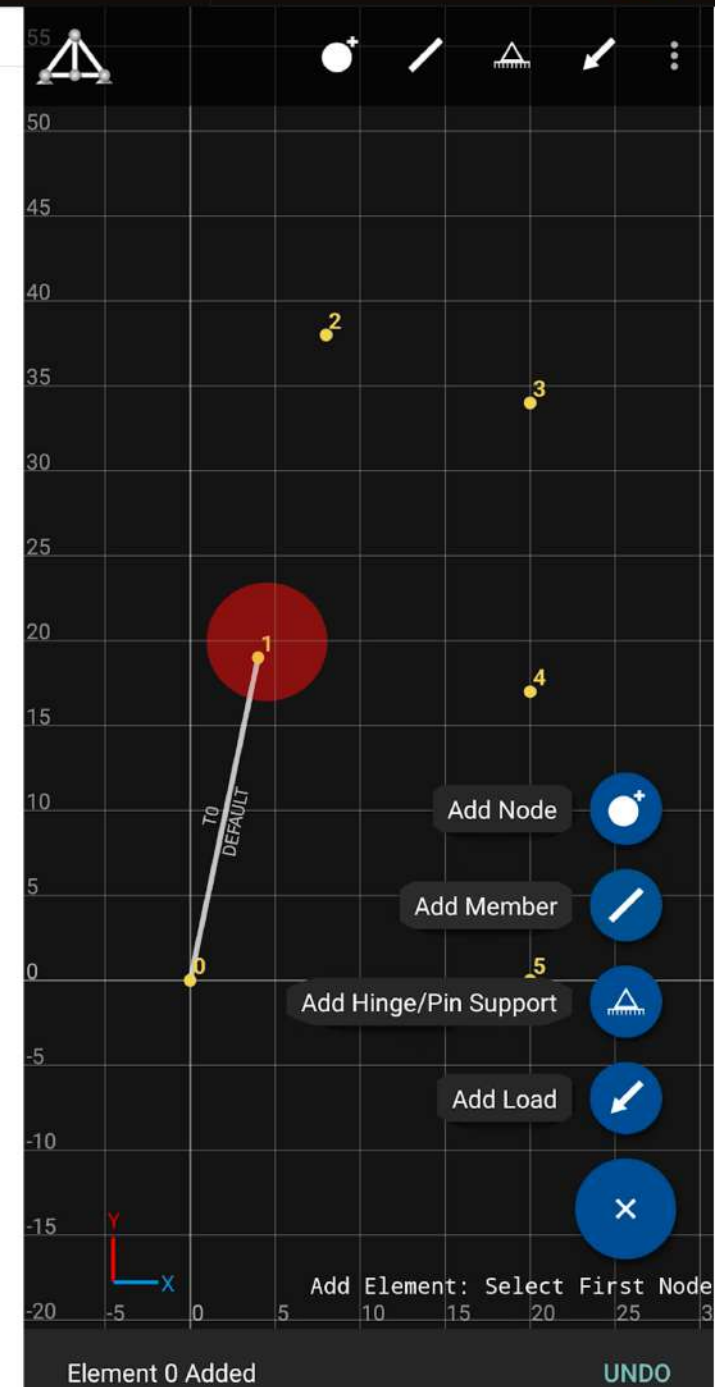
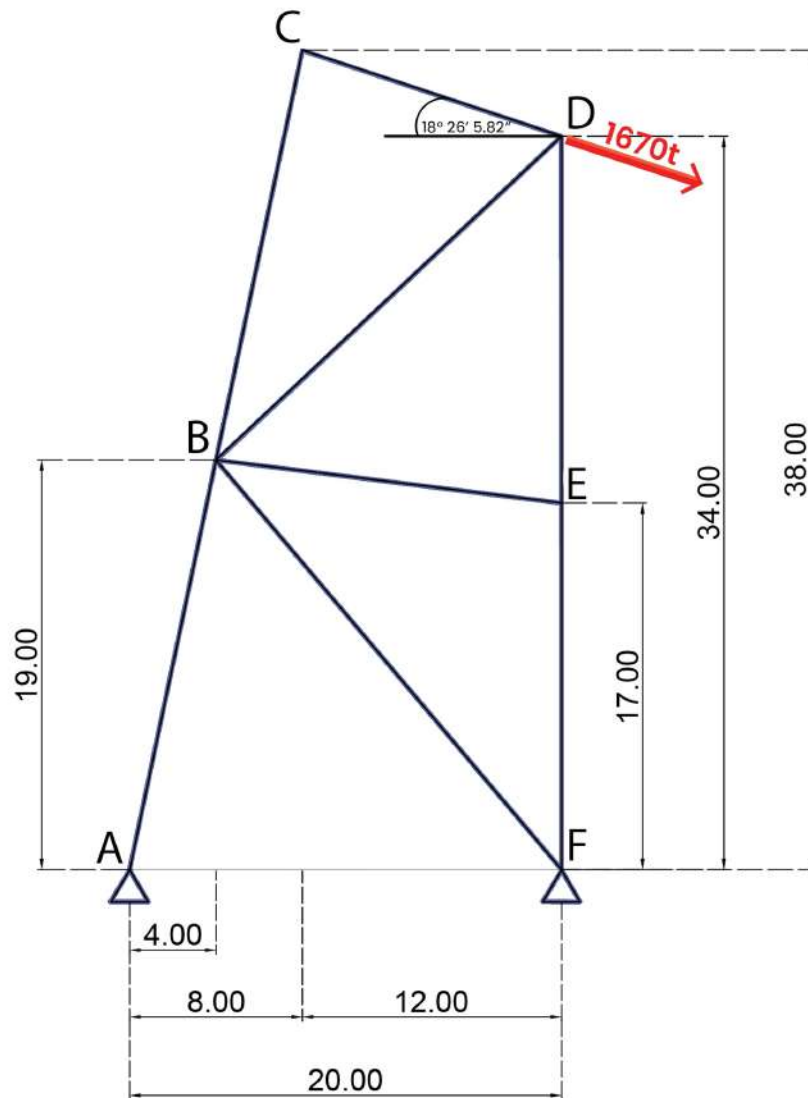
UNDO

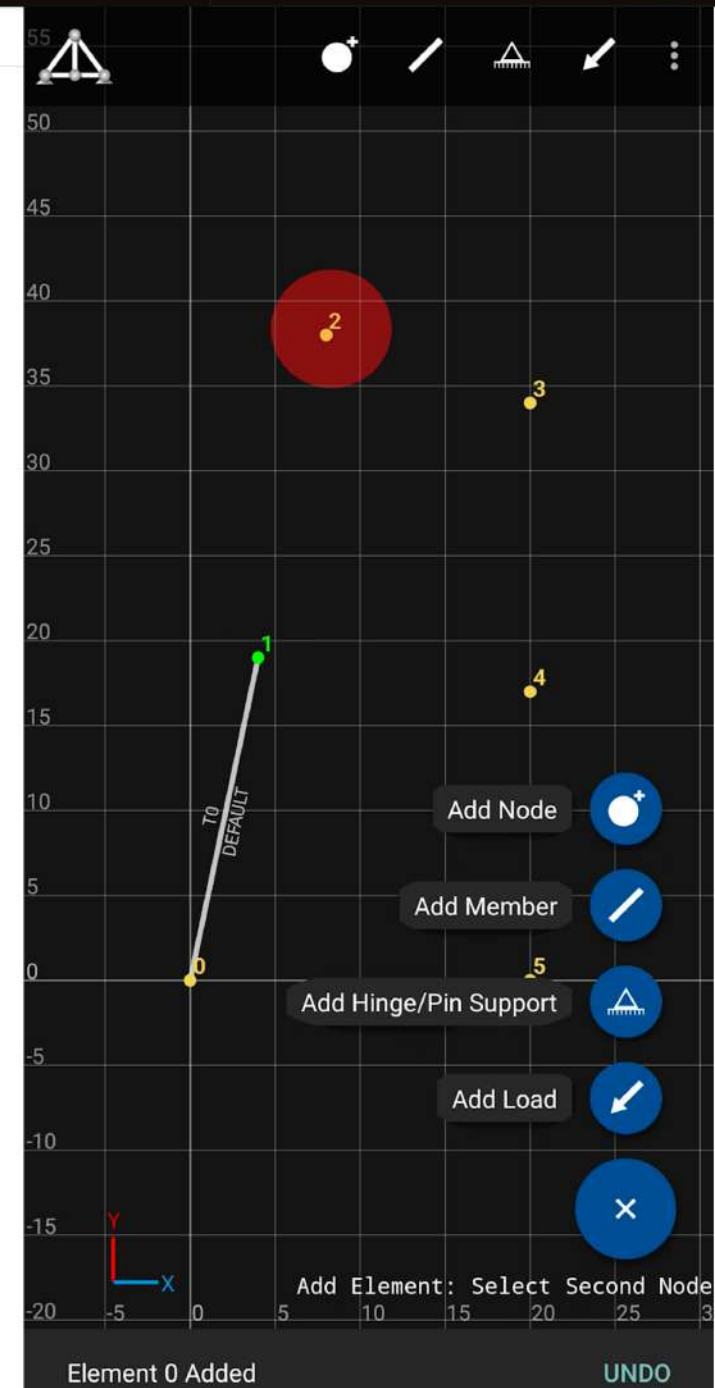
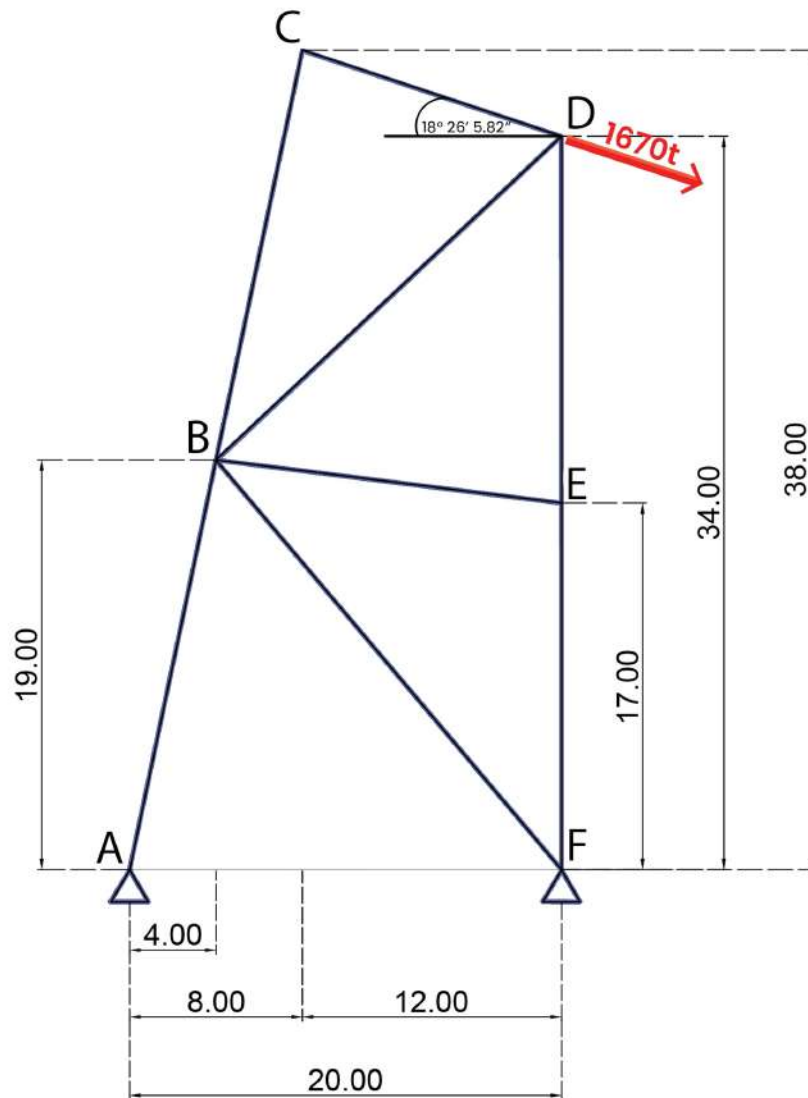


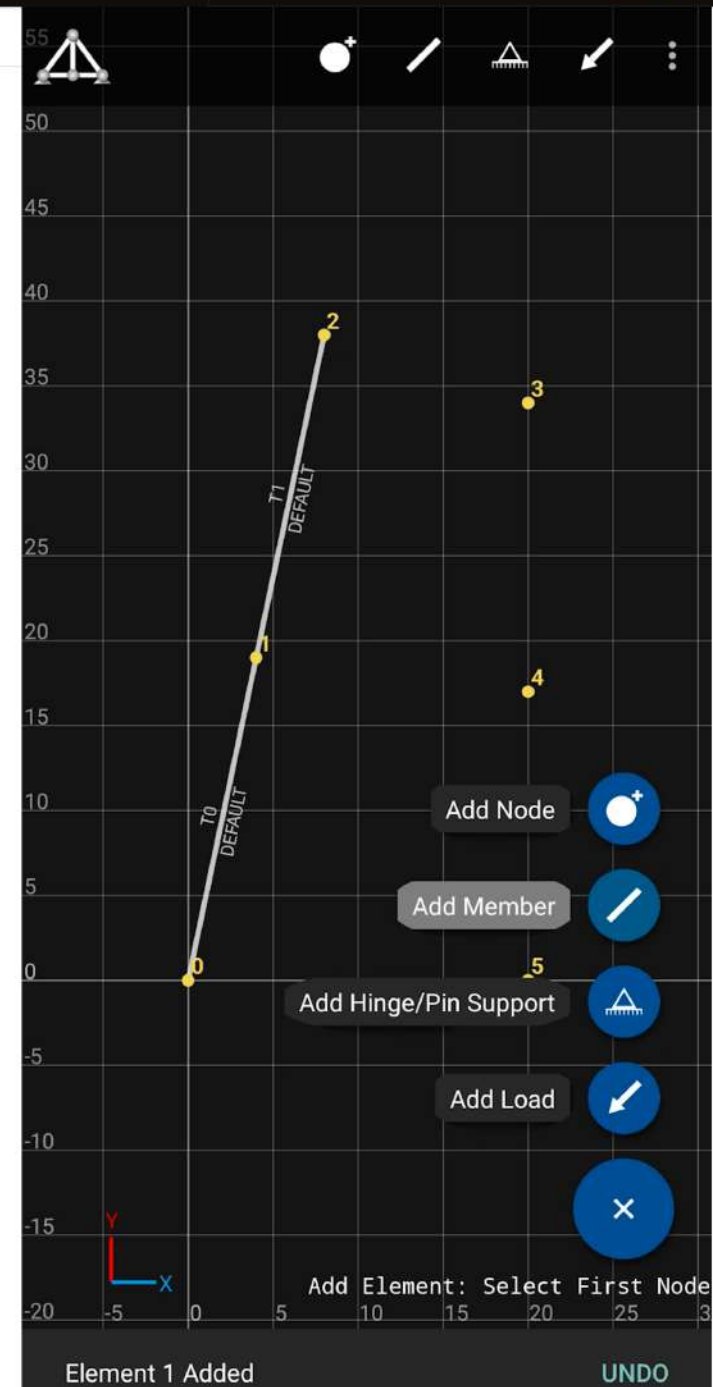
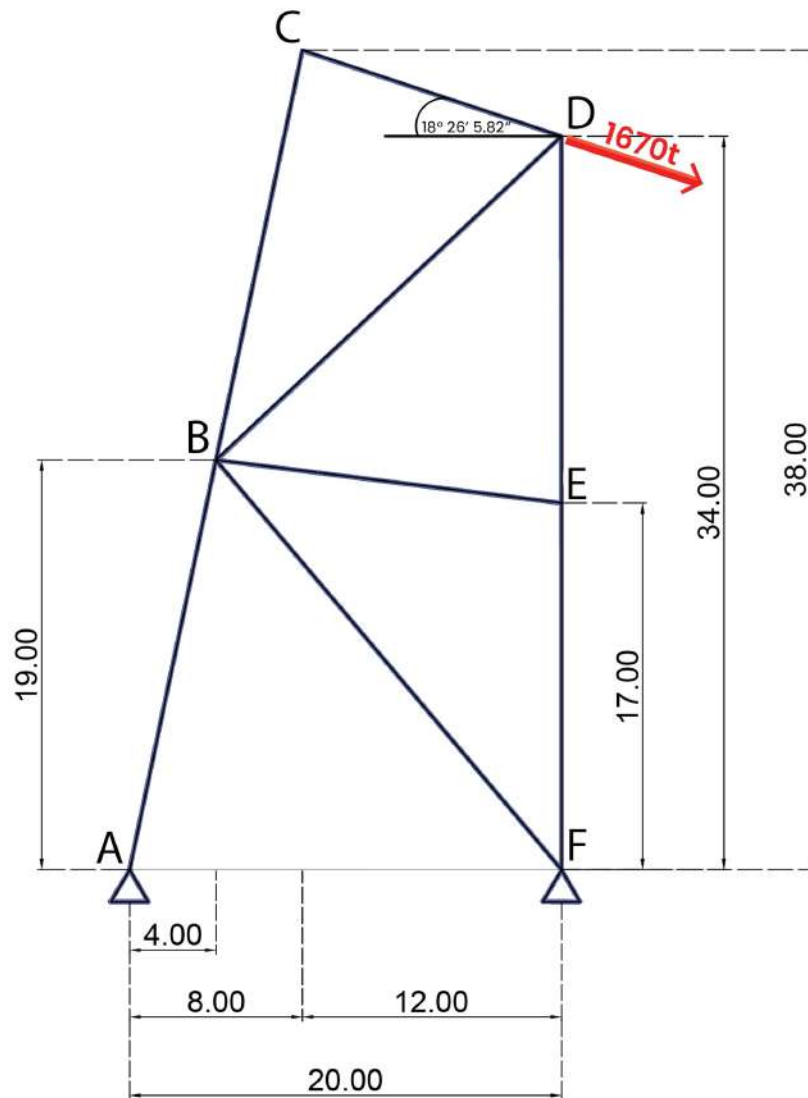


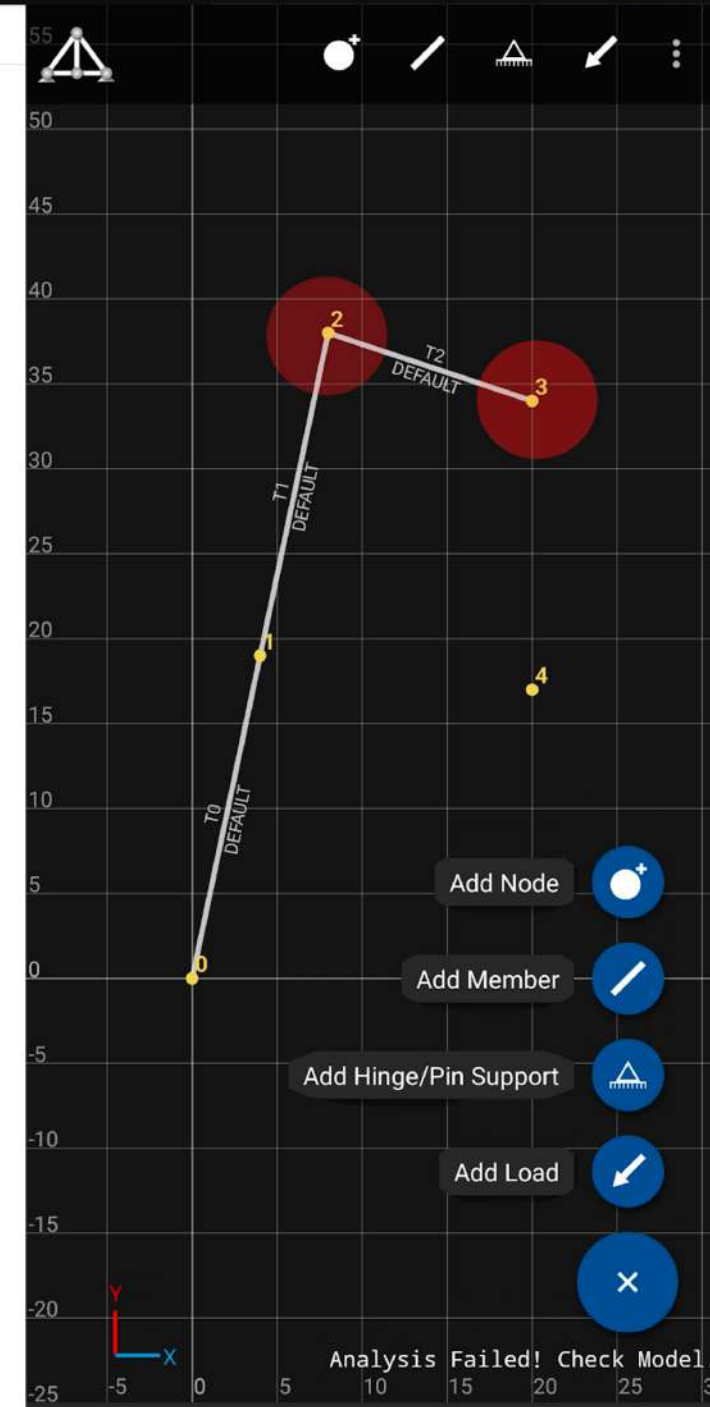
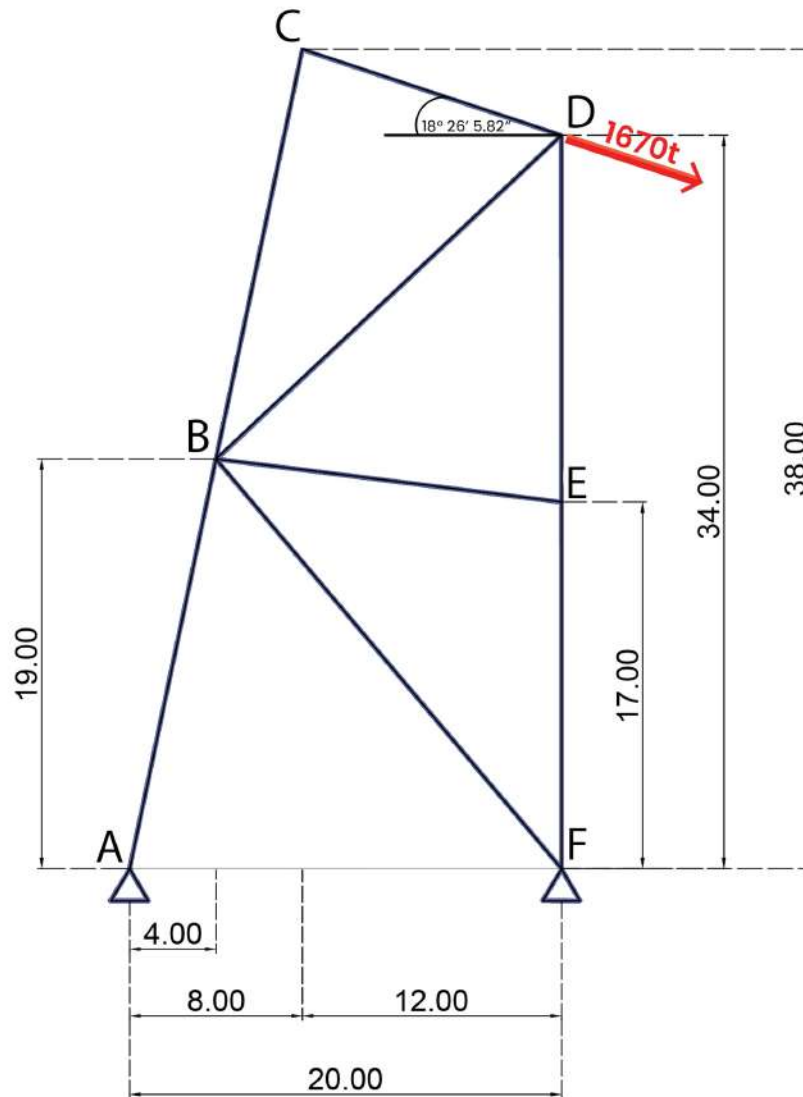


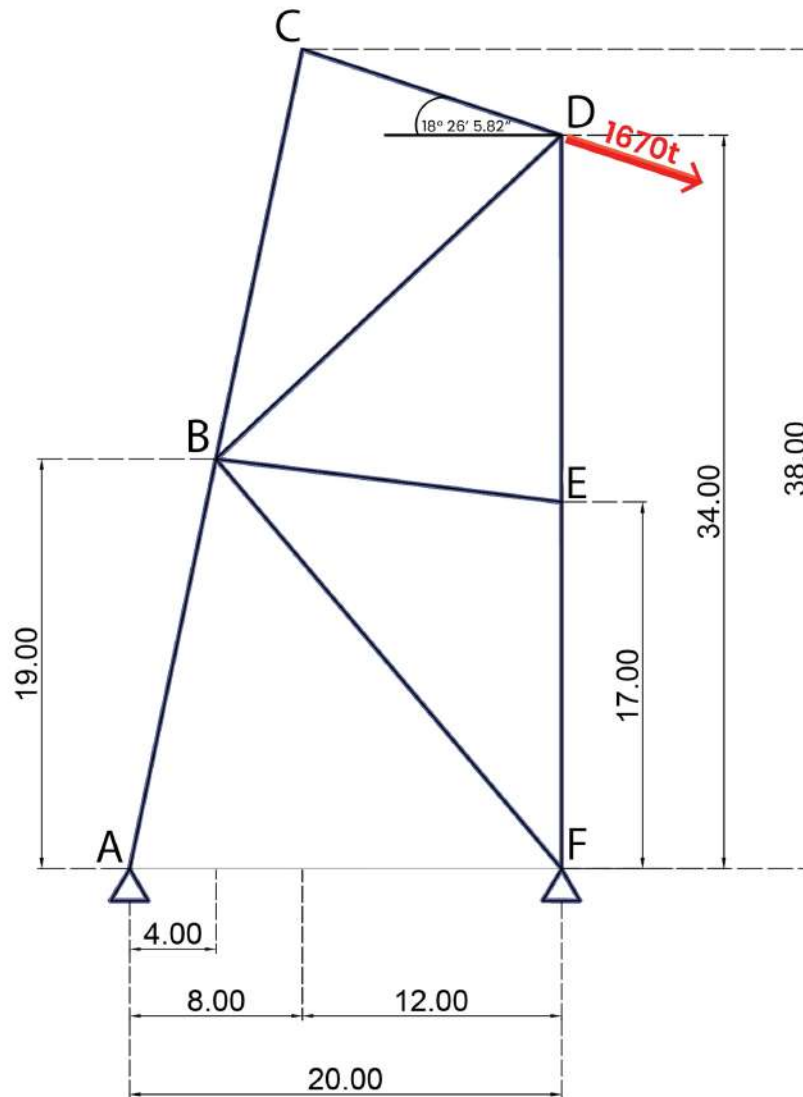


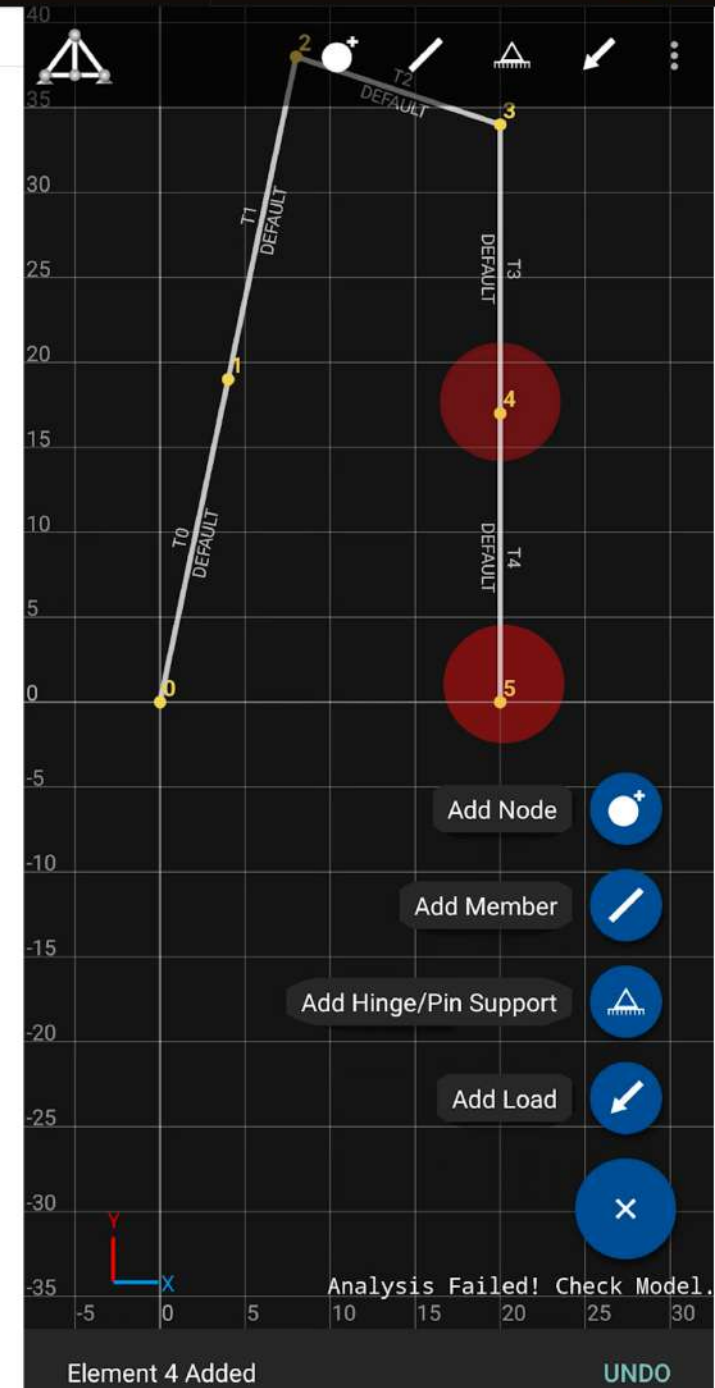
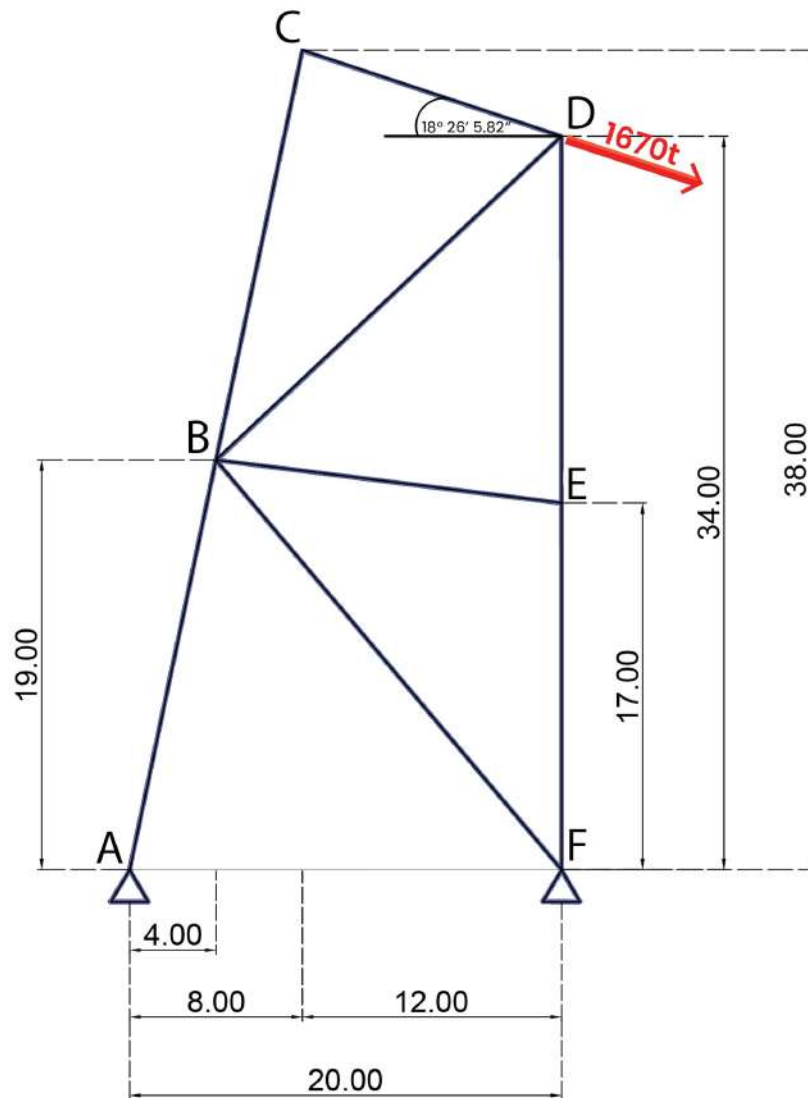


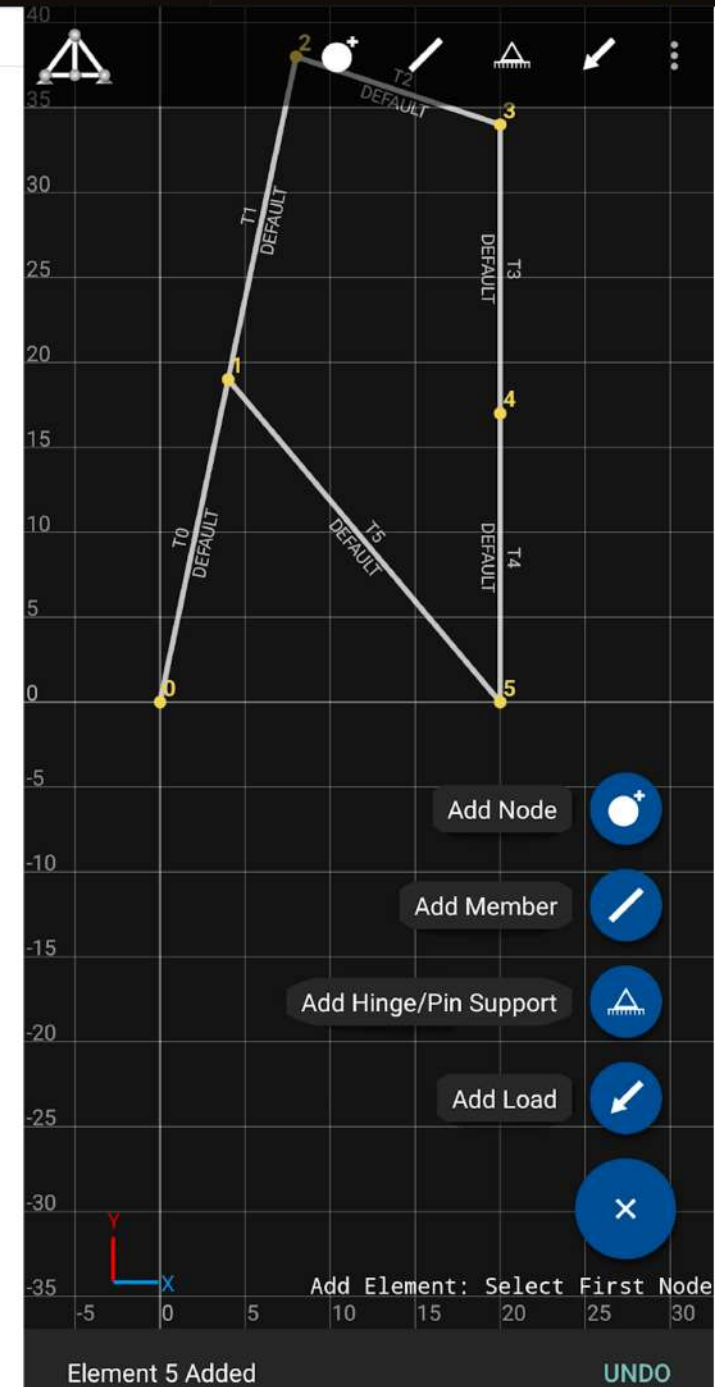
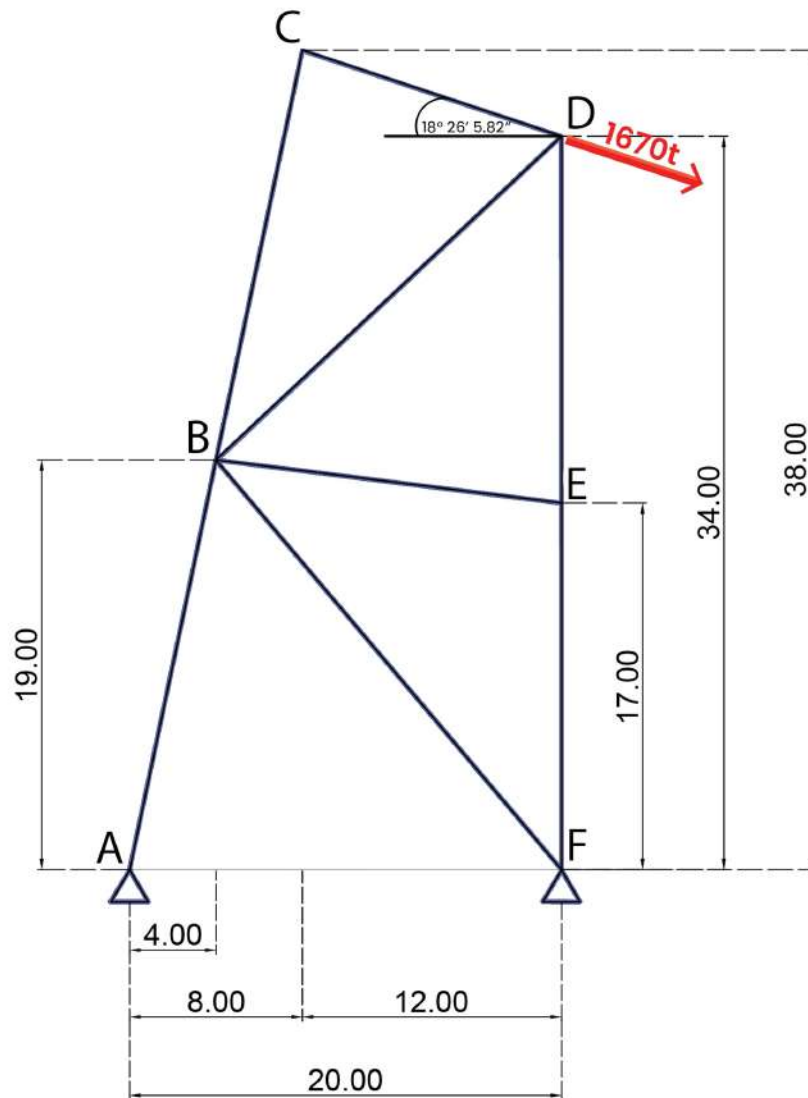


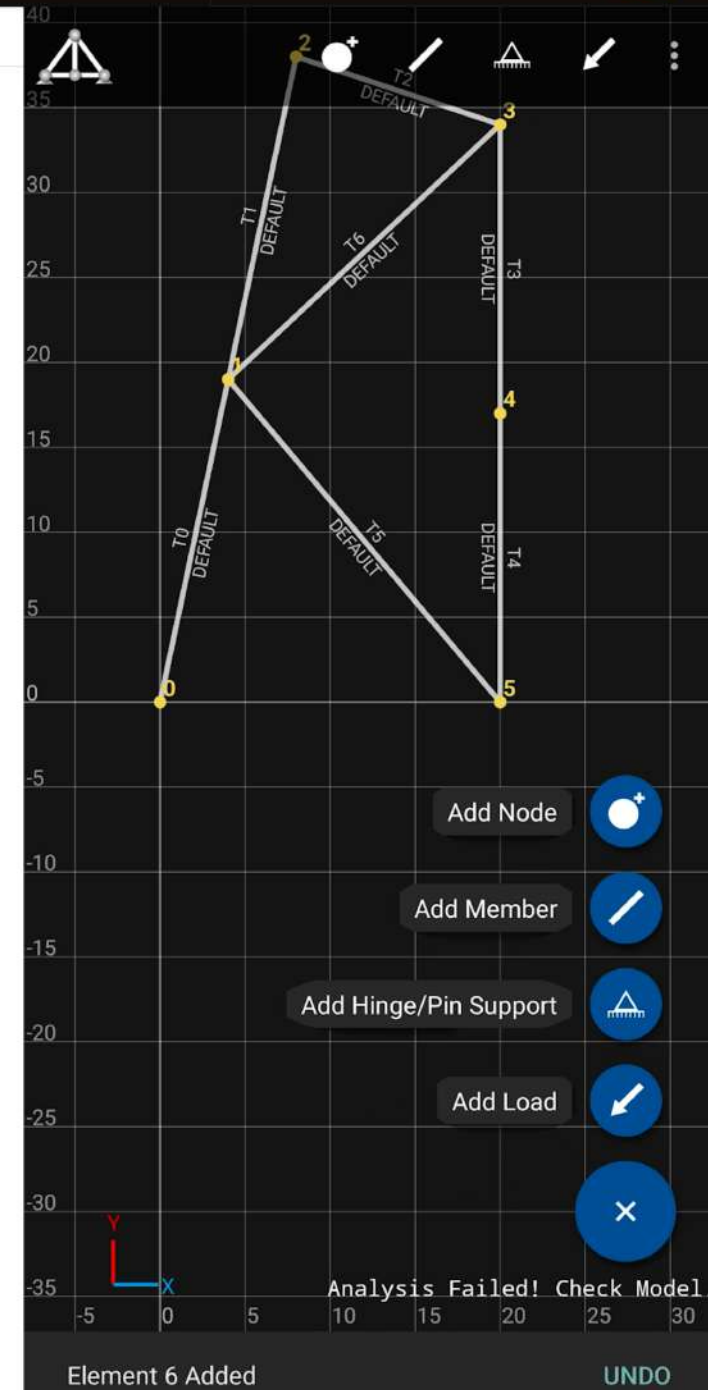
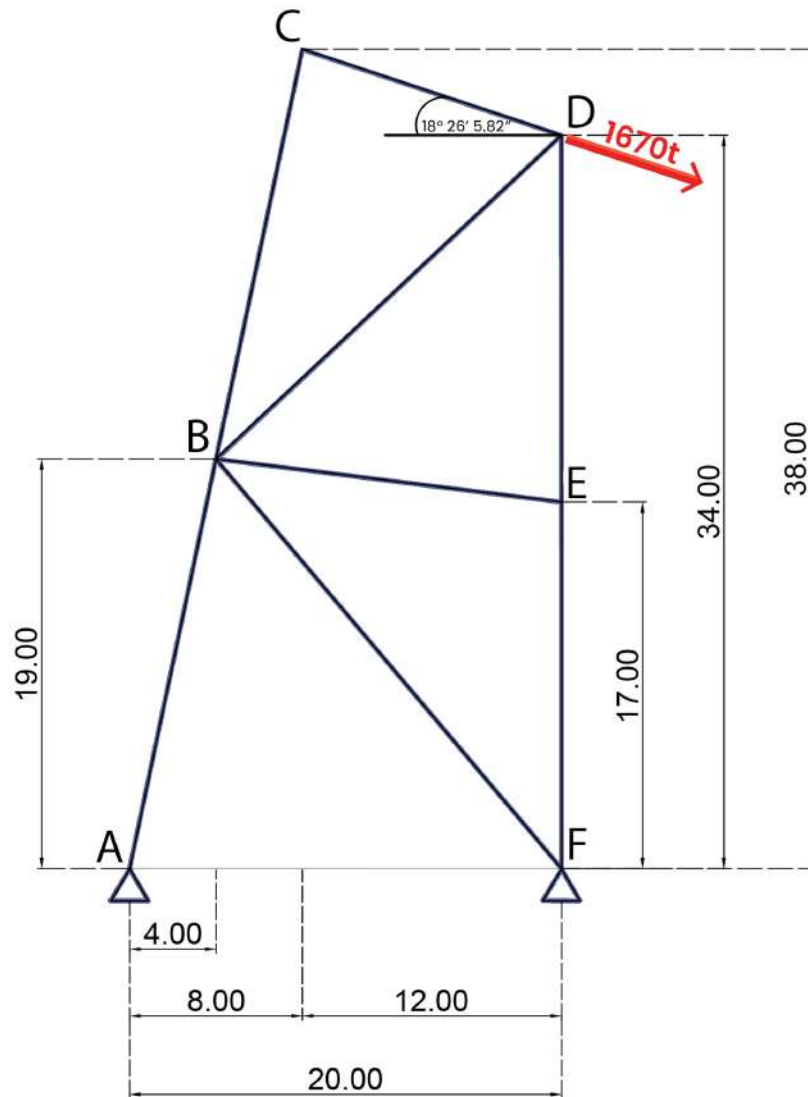


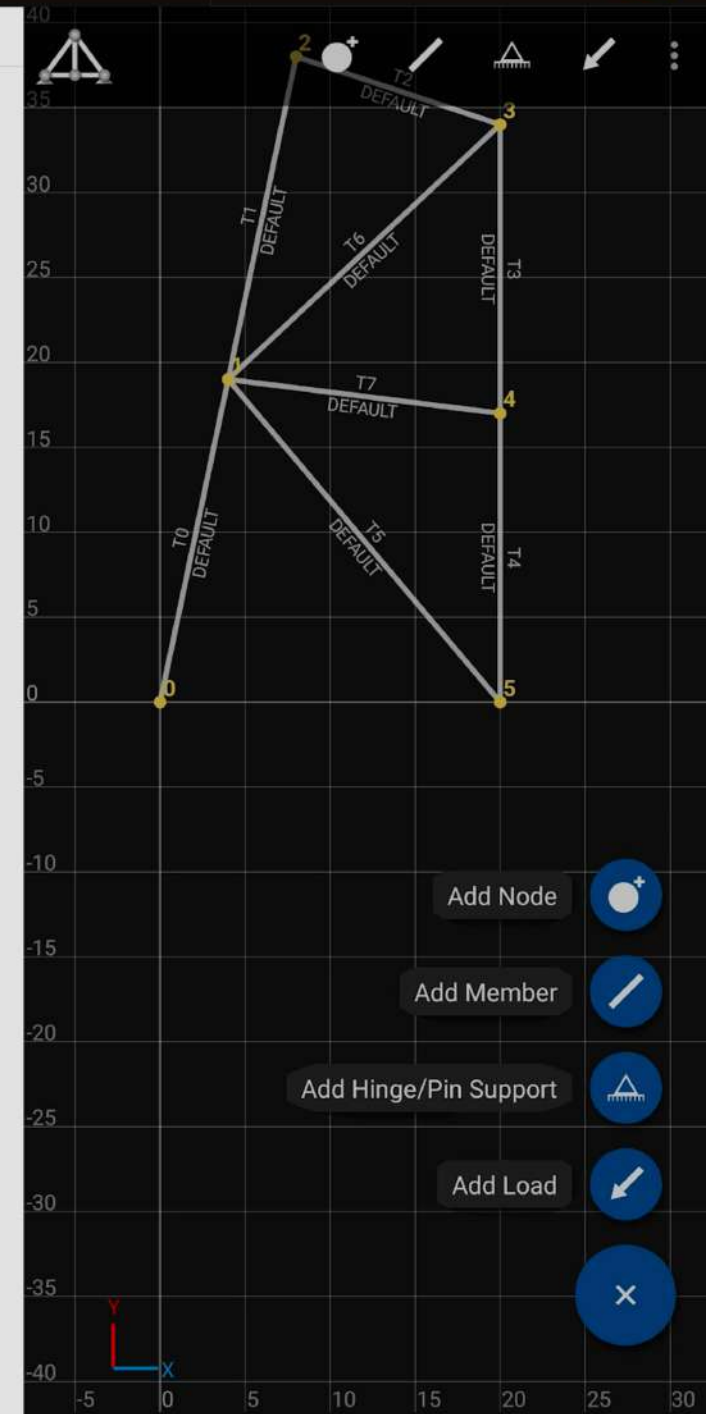
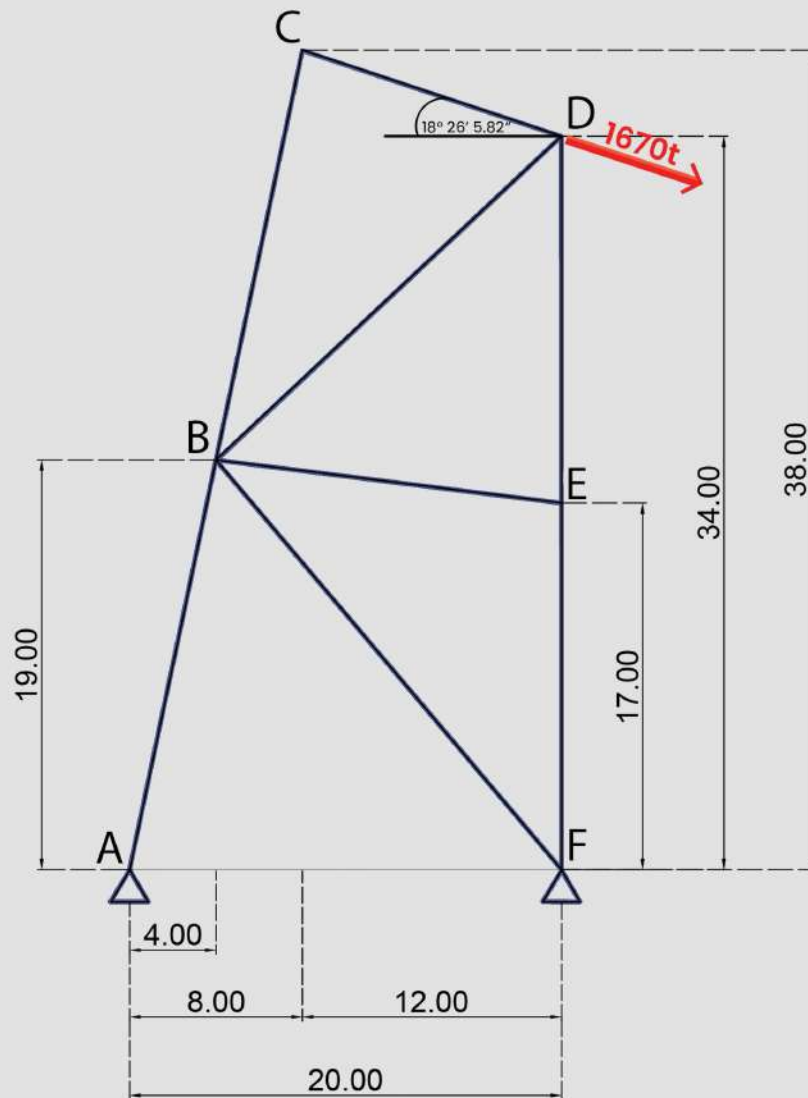


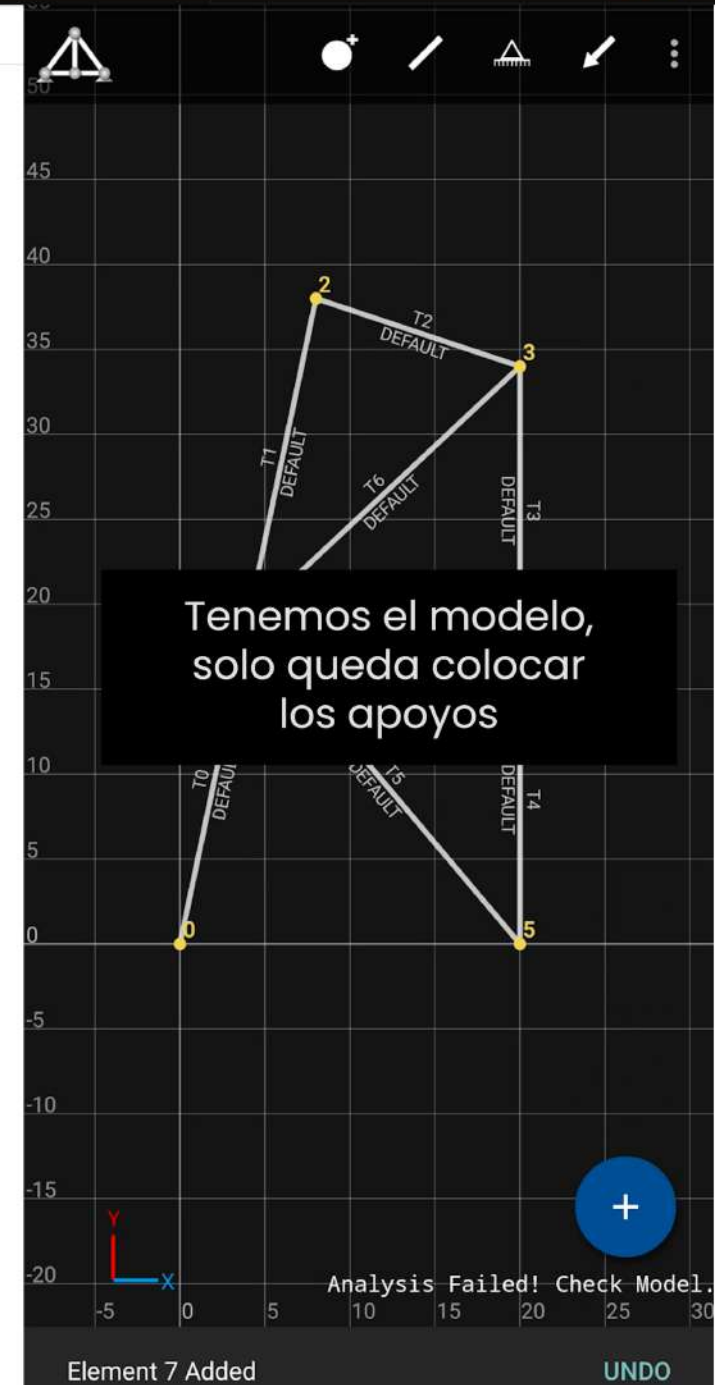
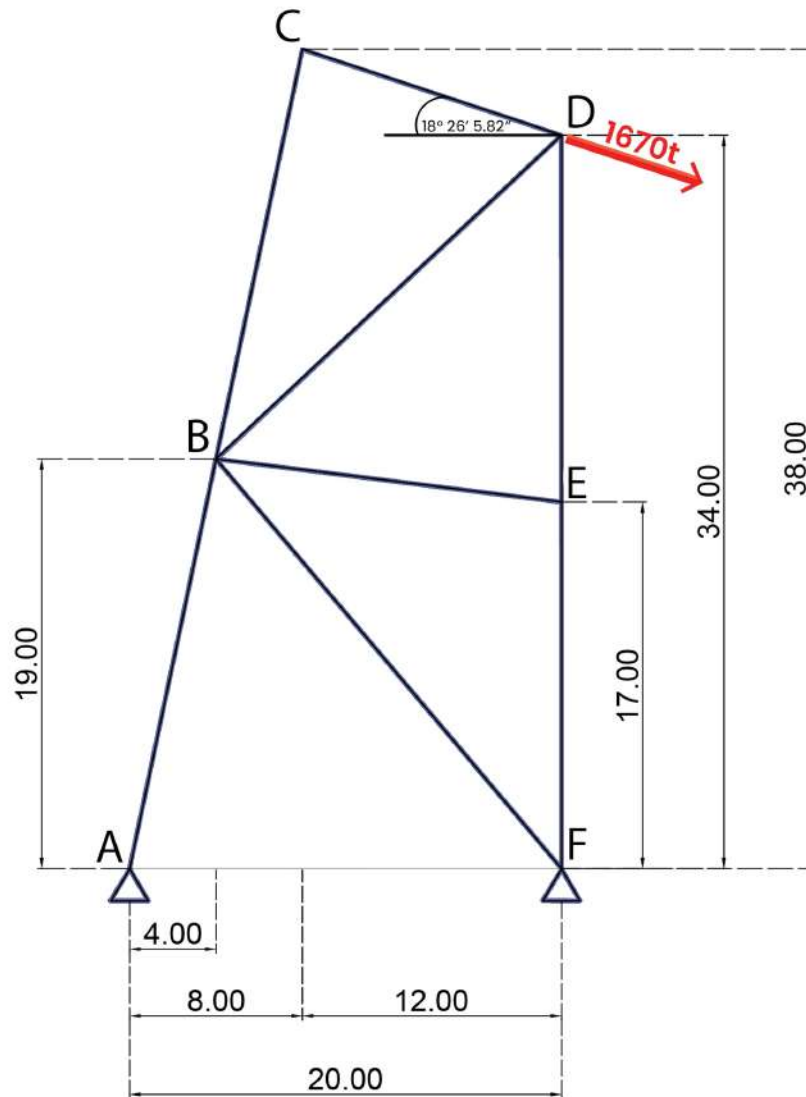


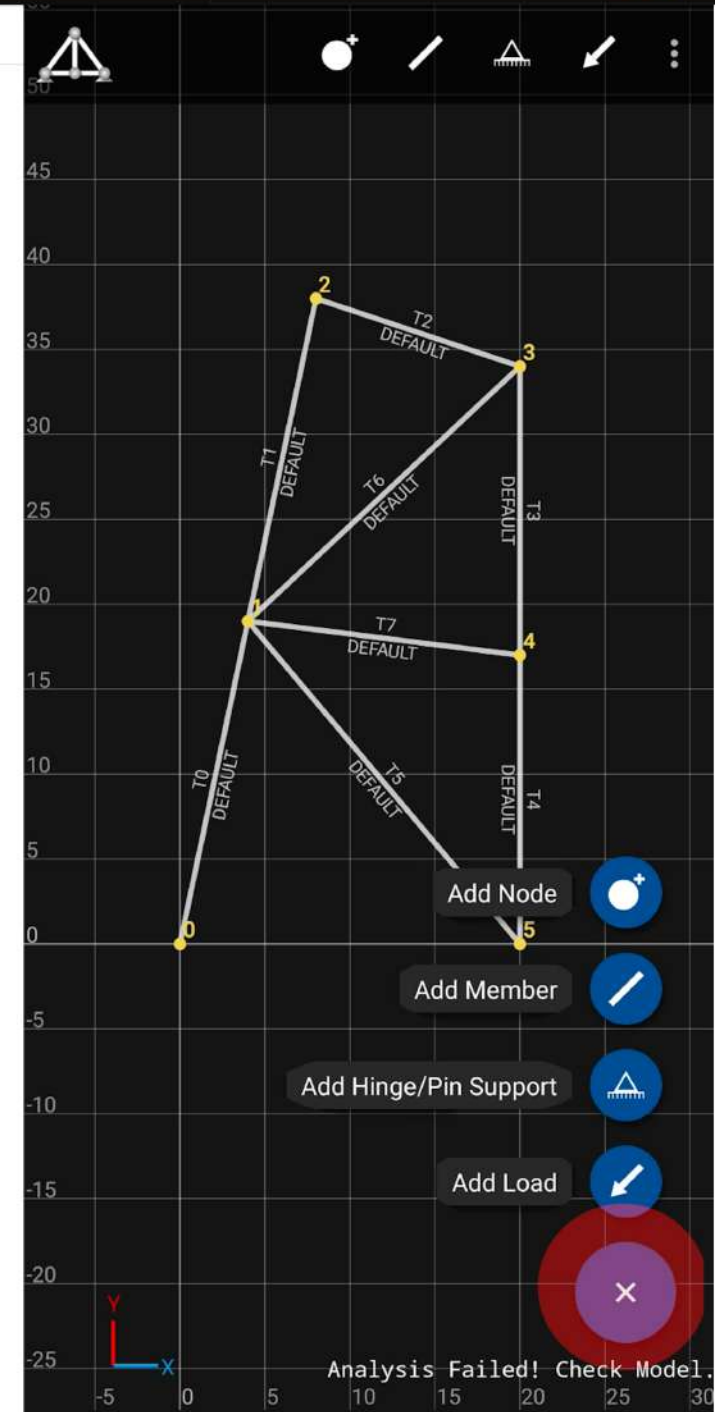
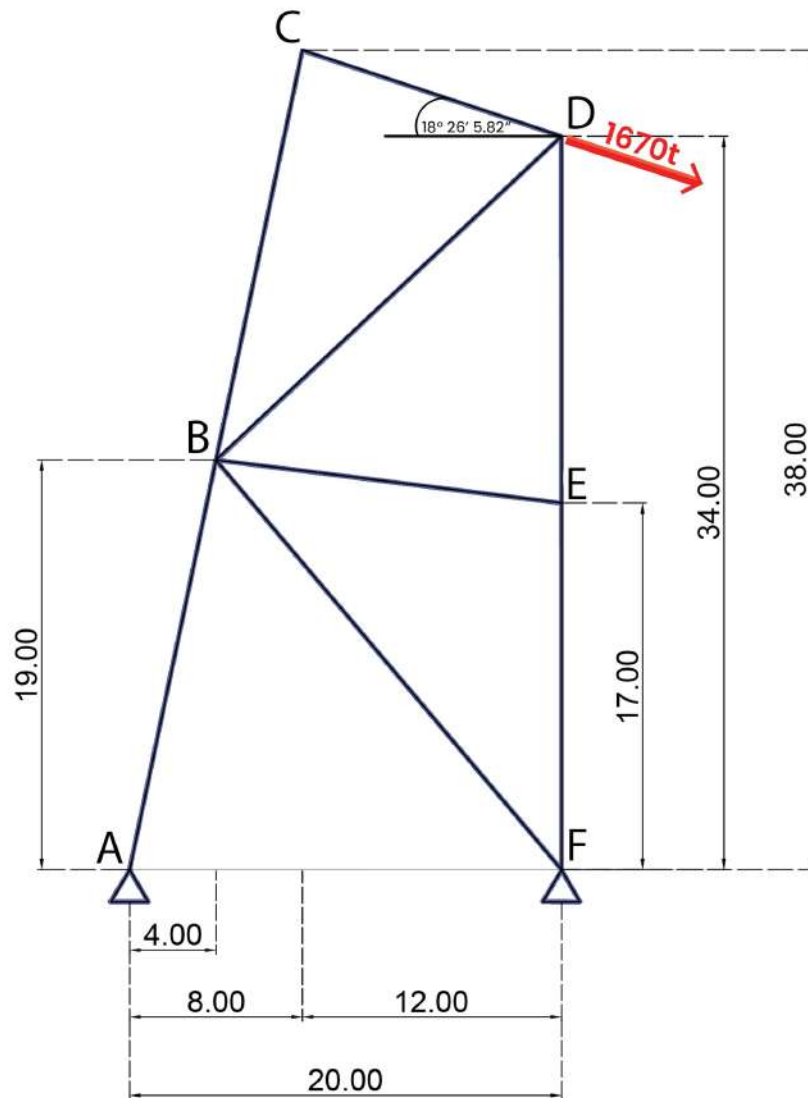


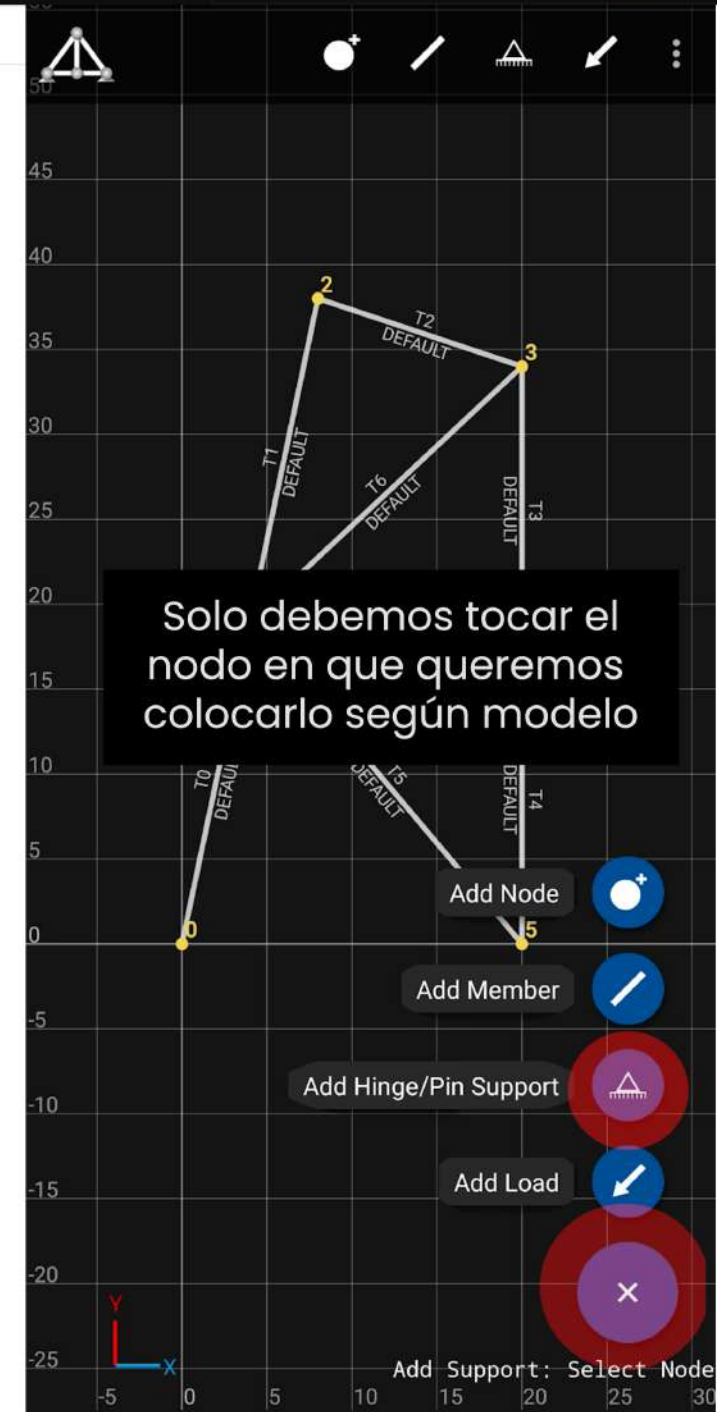
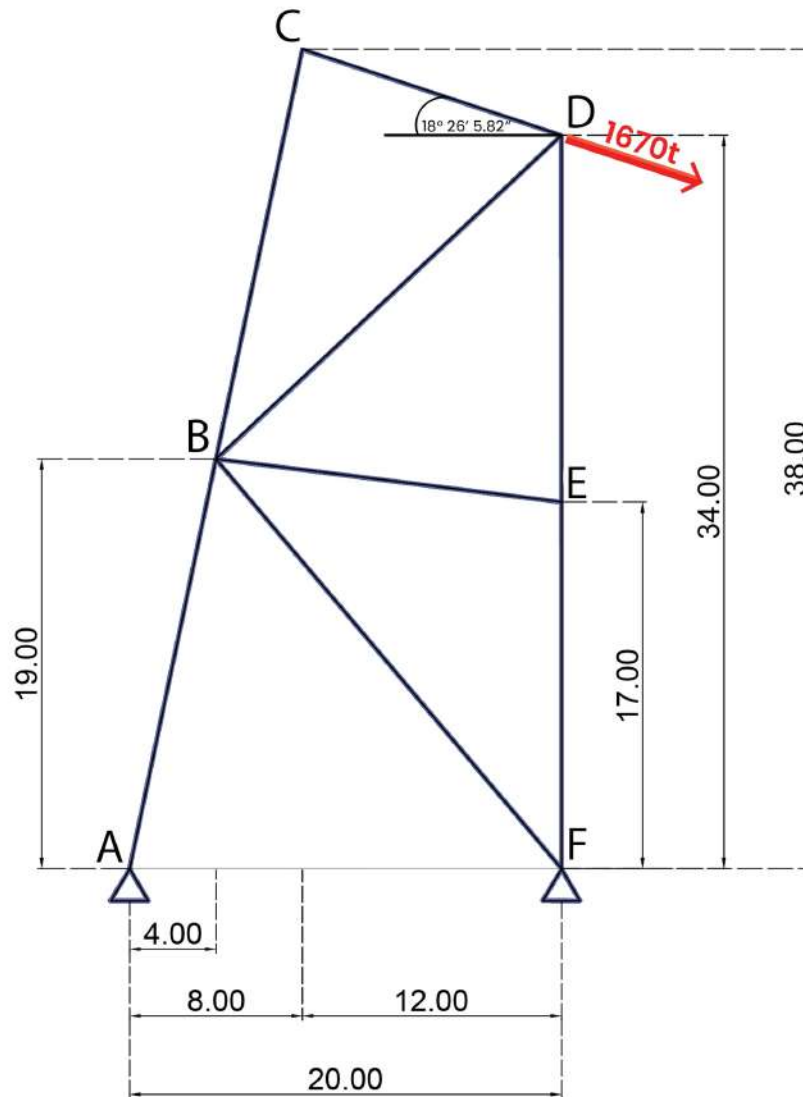


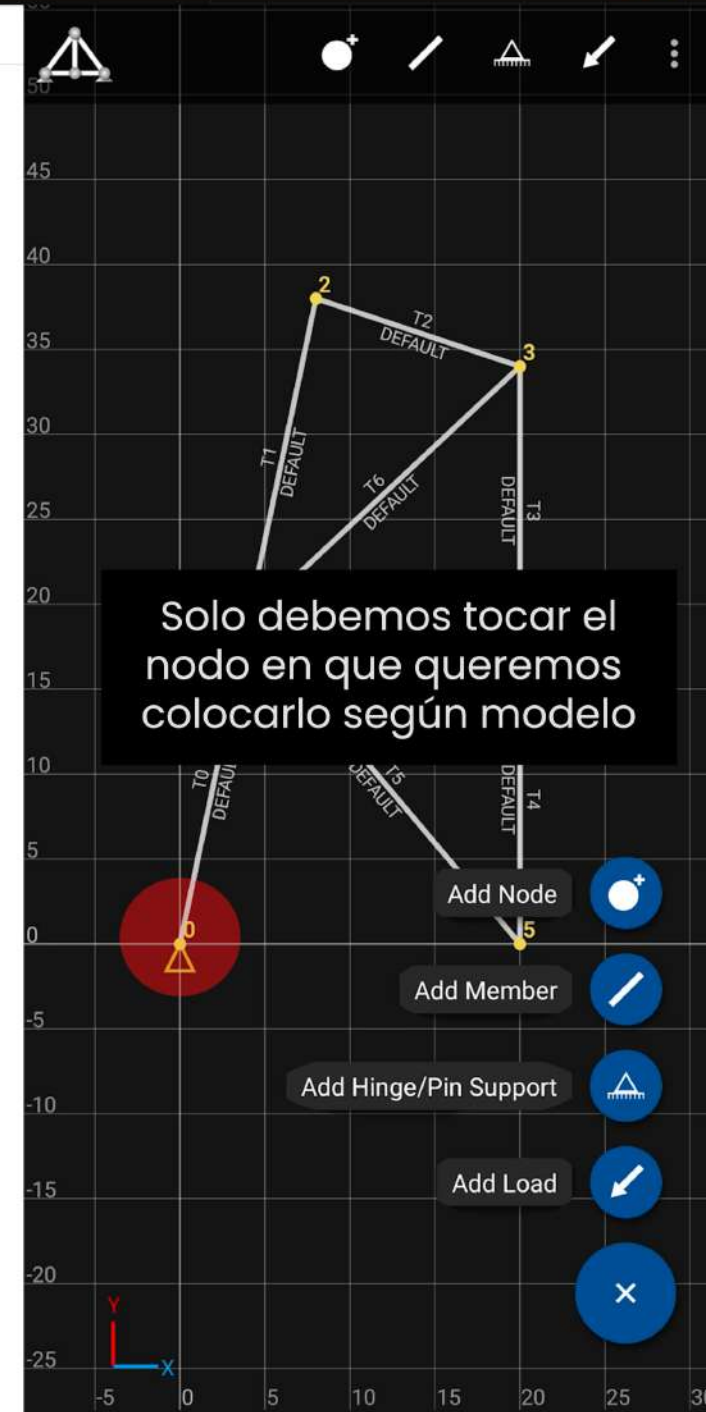
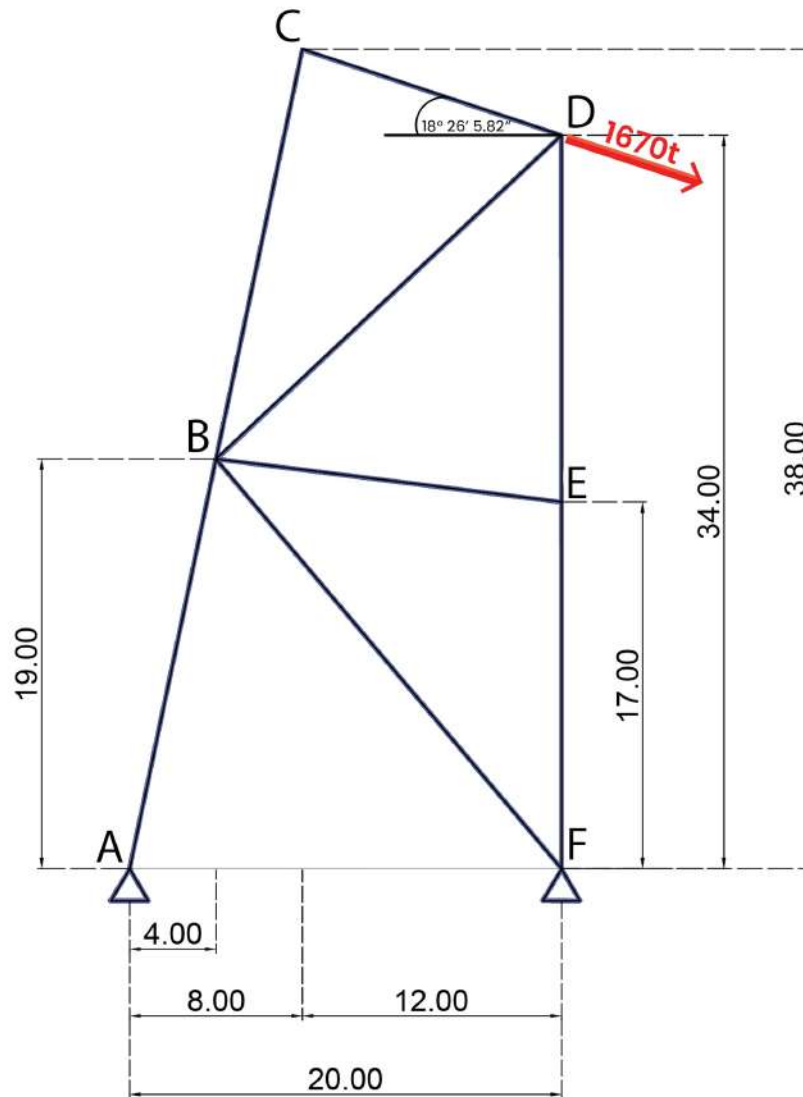


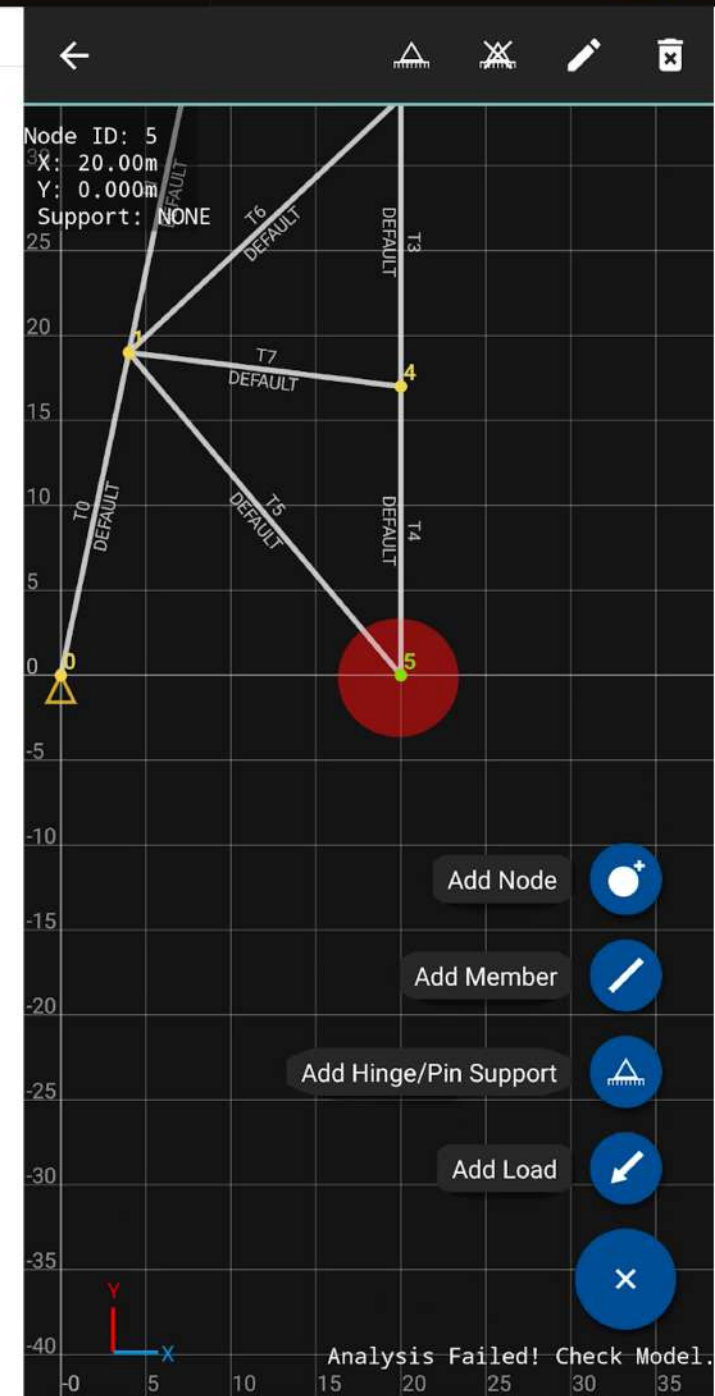
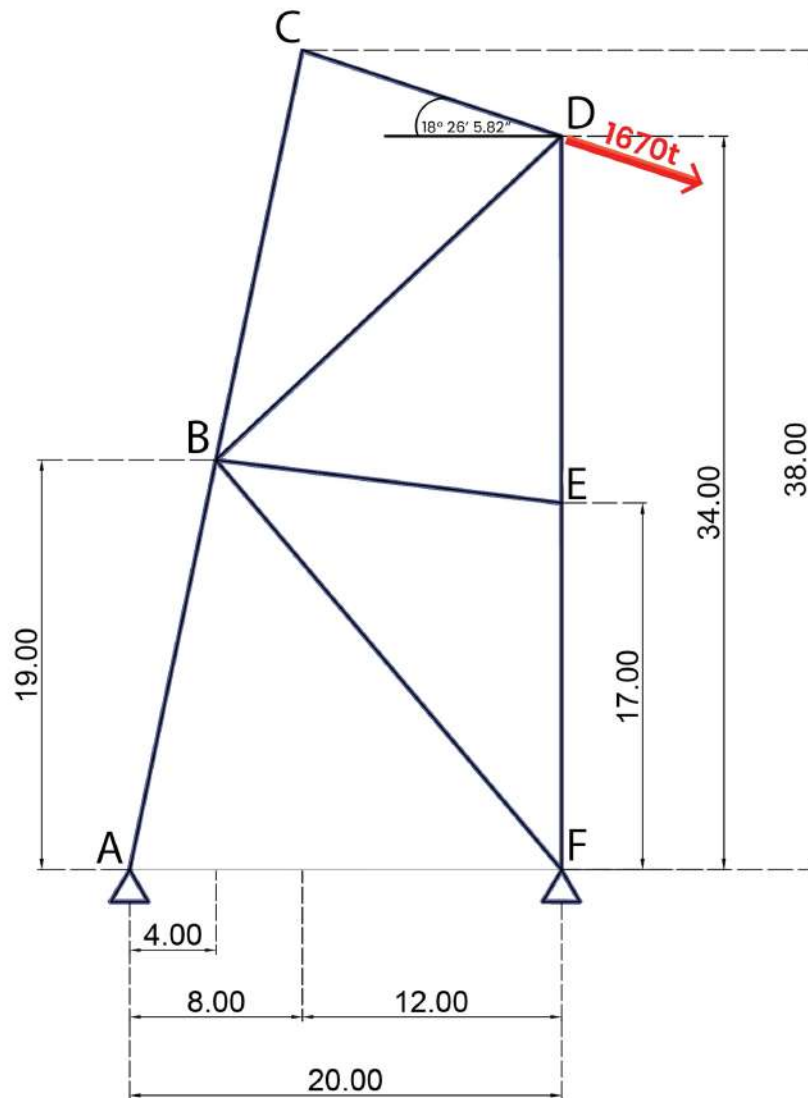


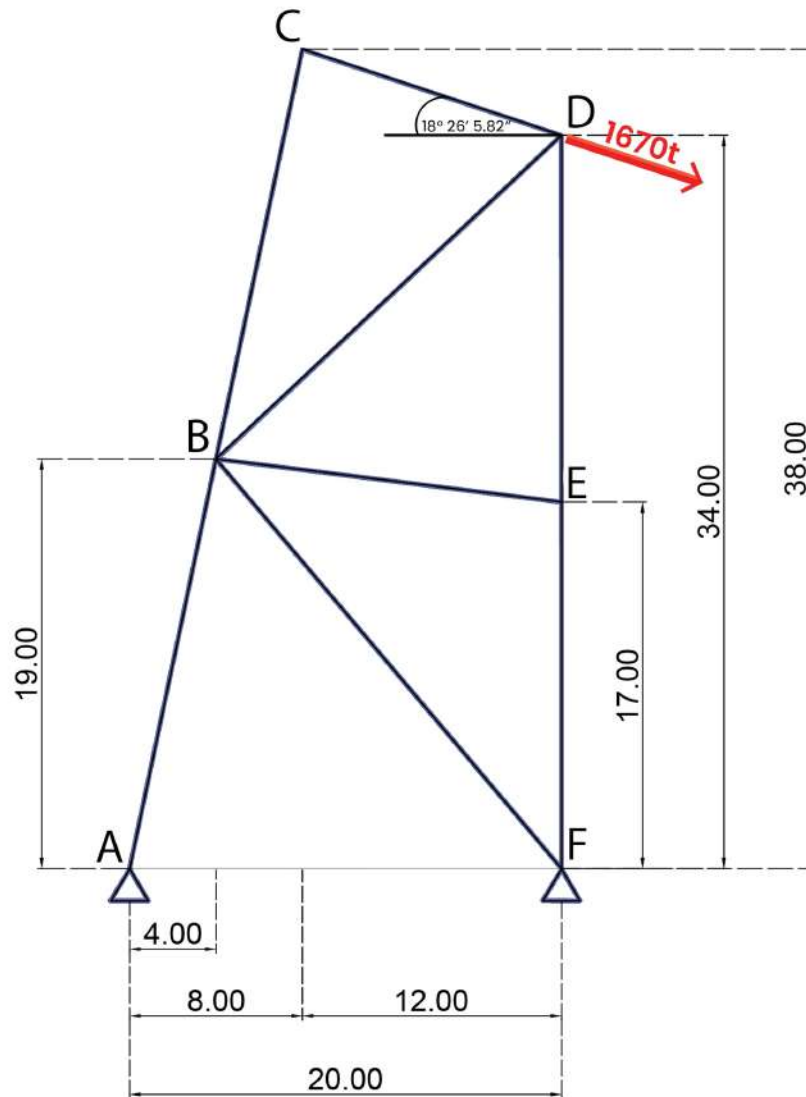


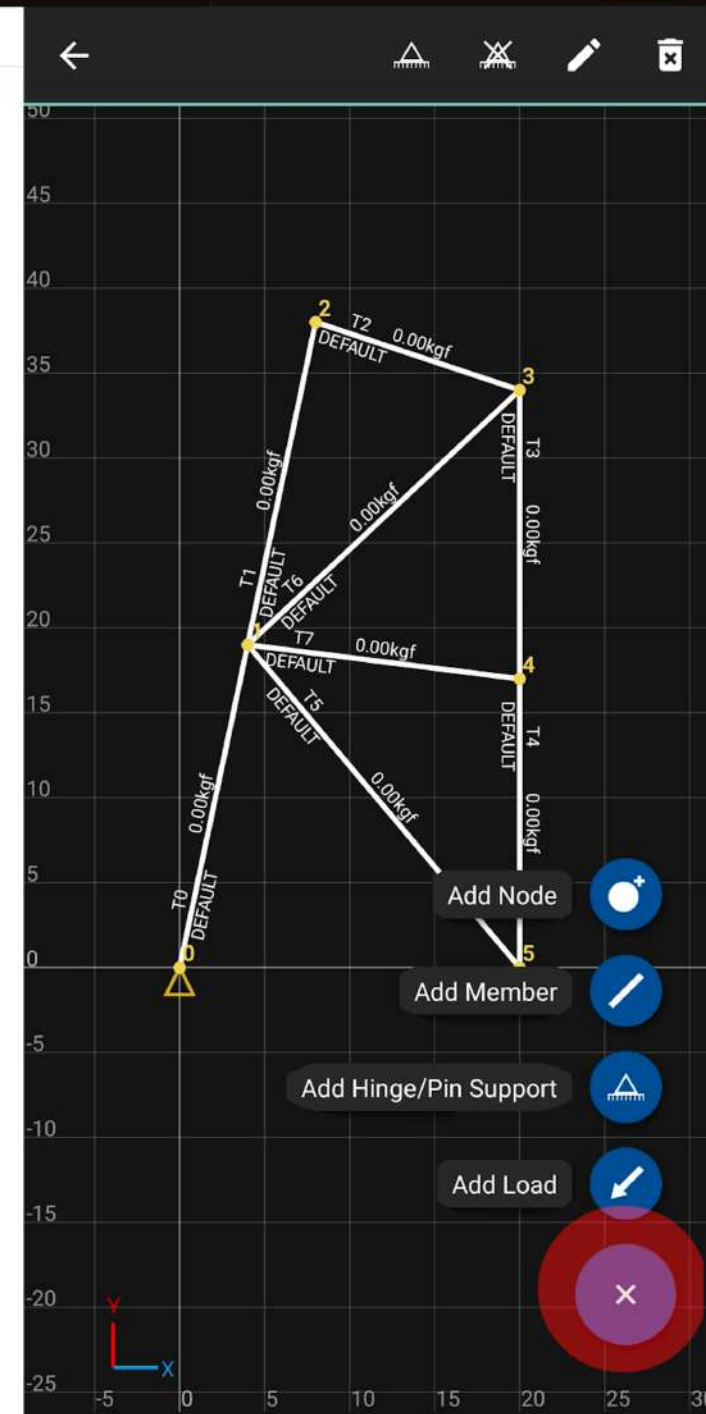
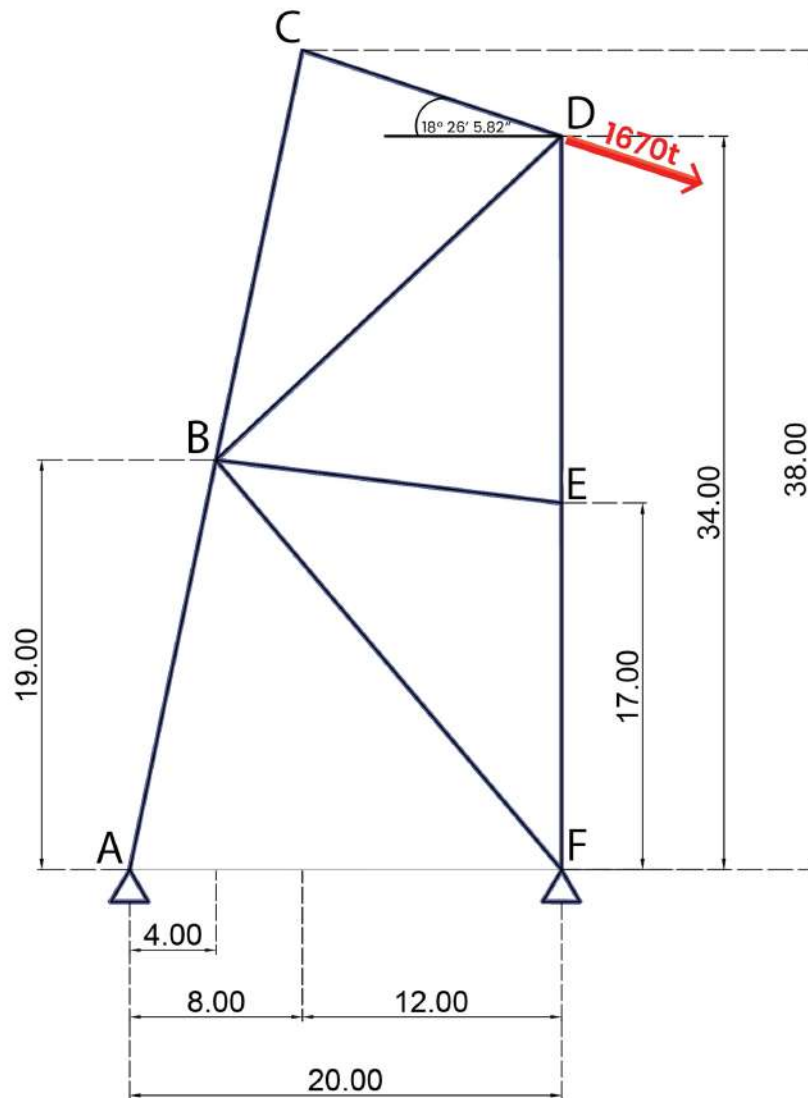


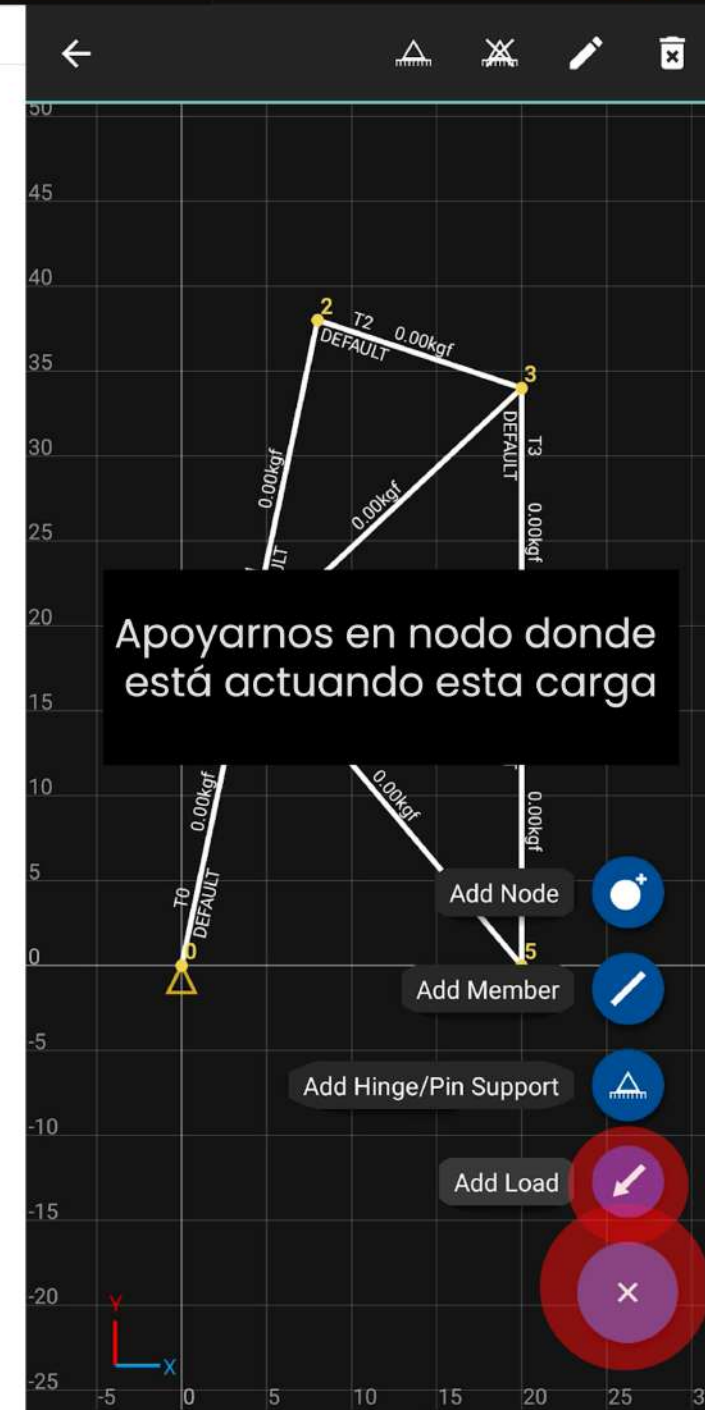
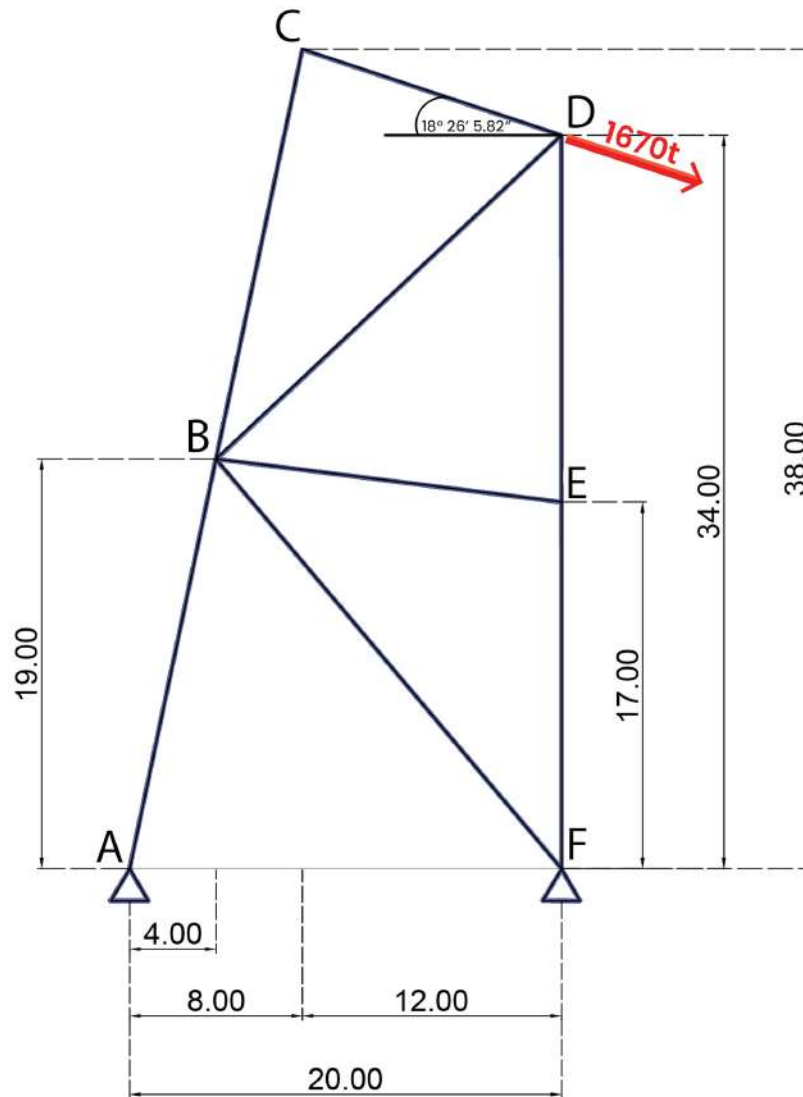


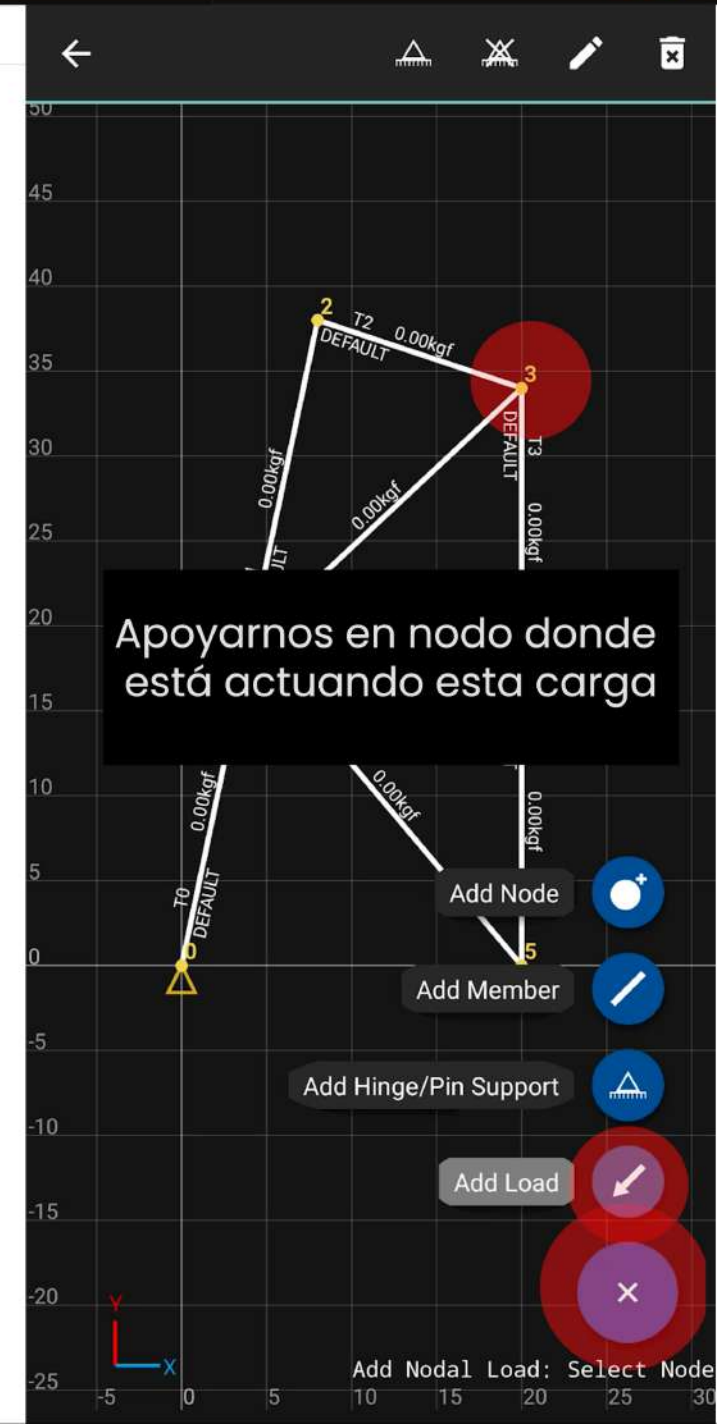
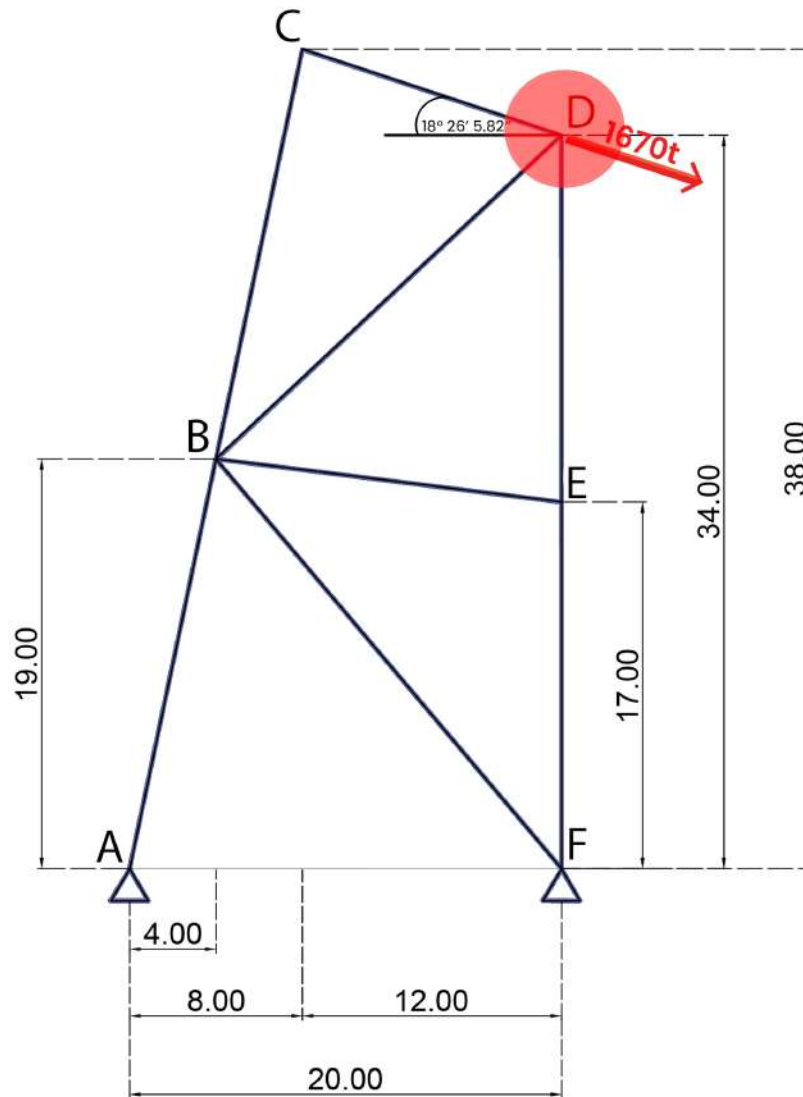


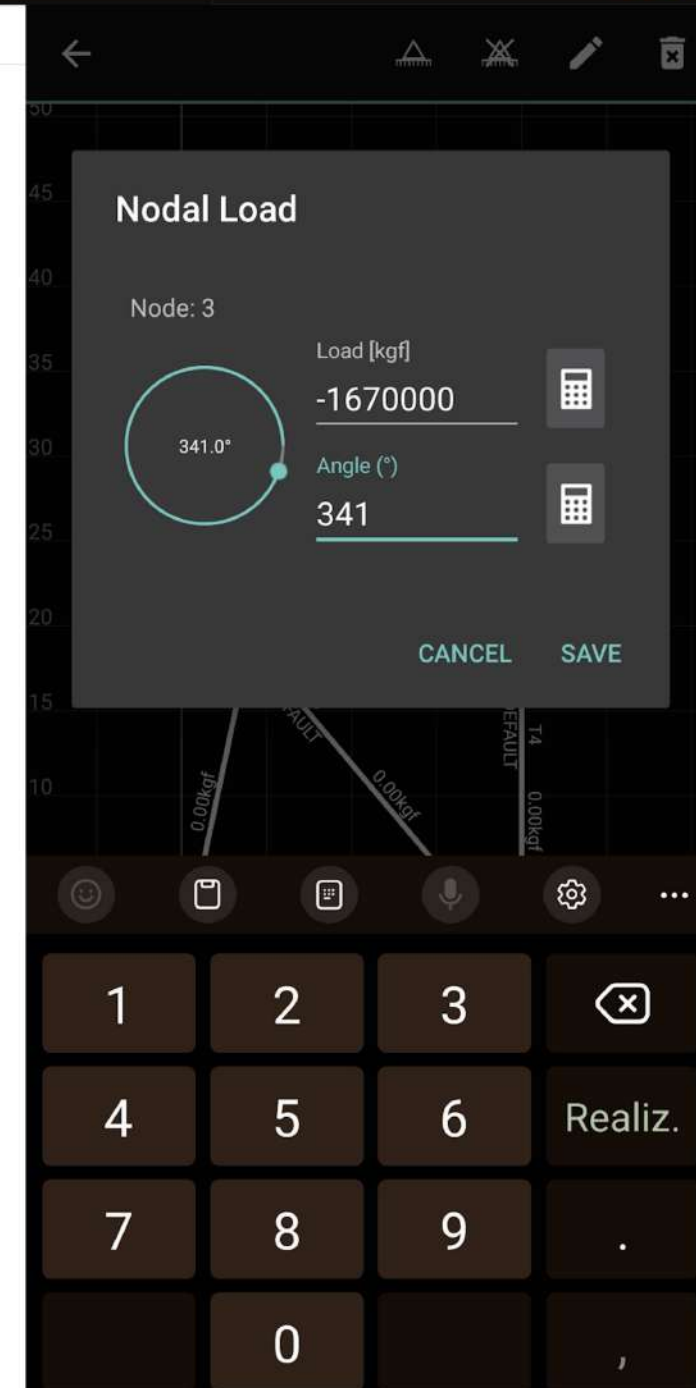
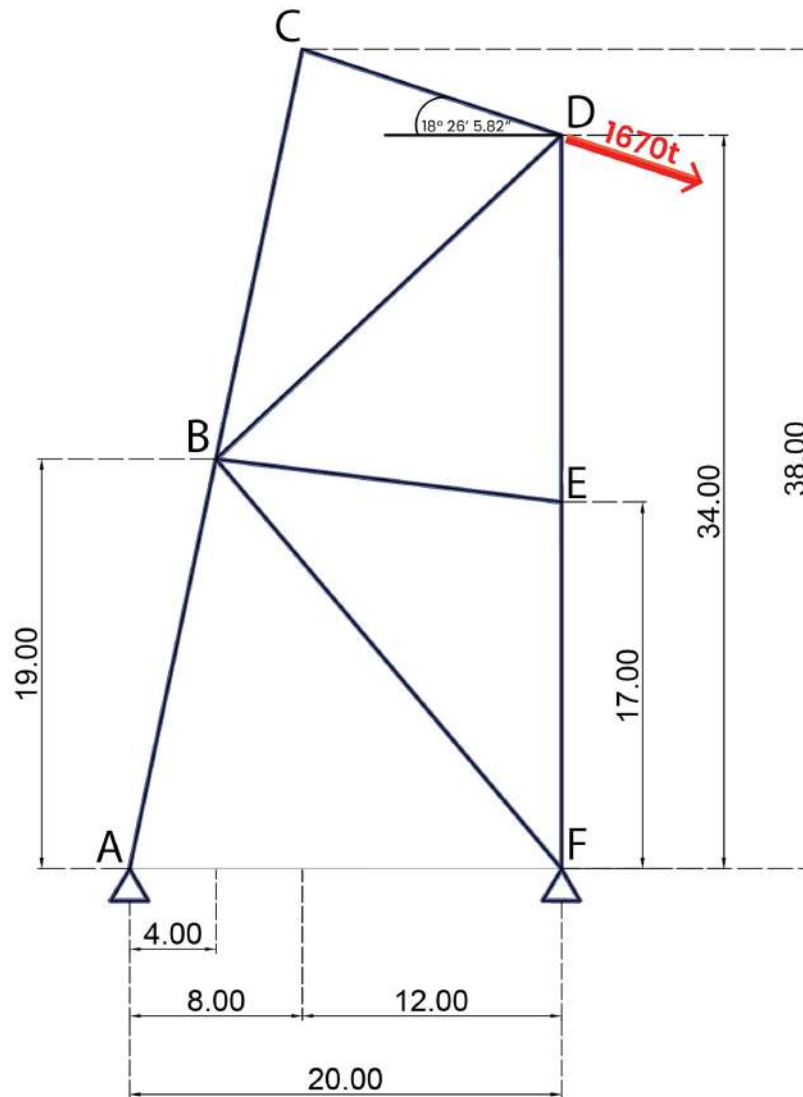


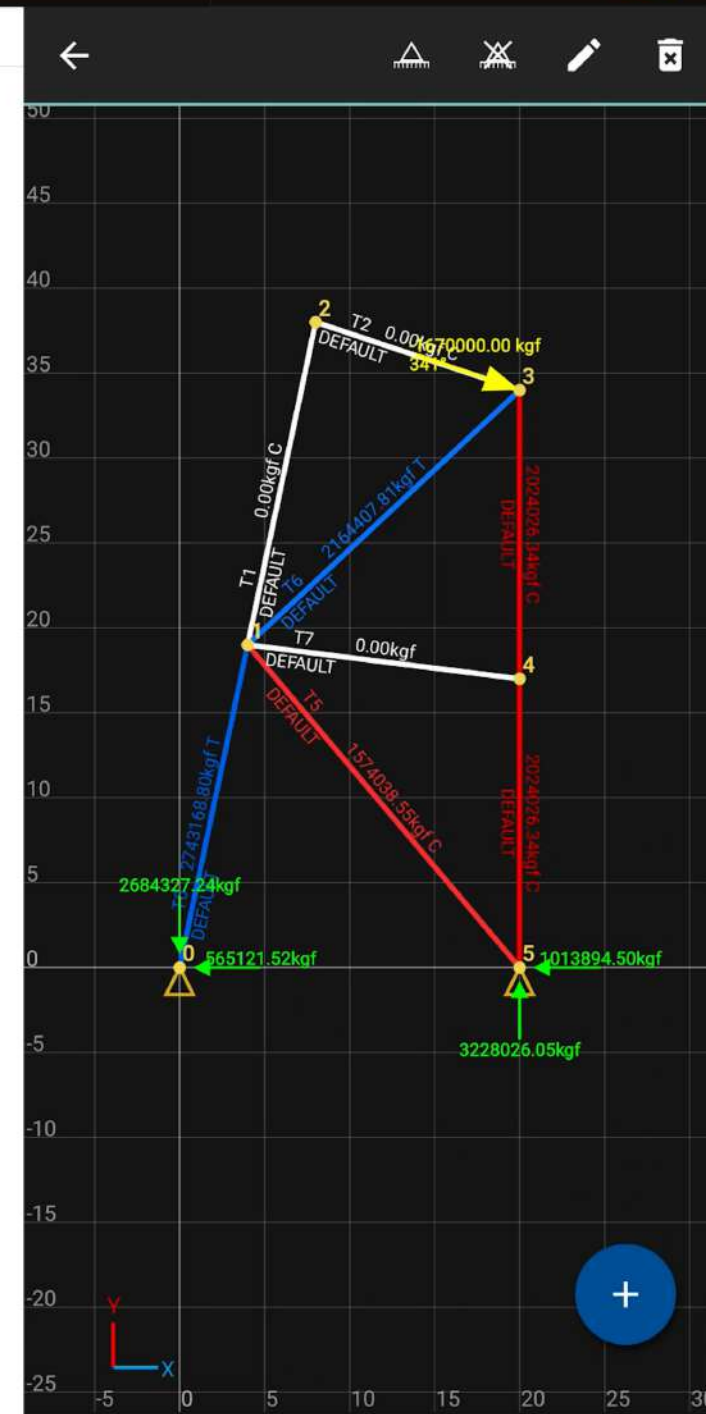
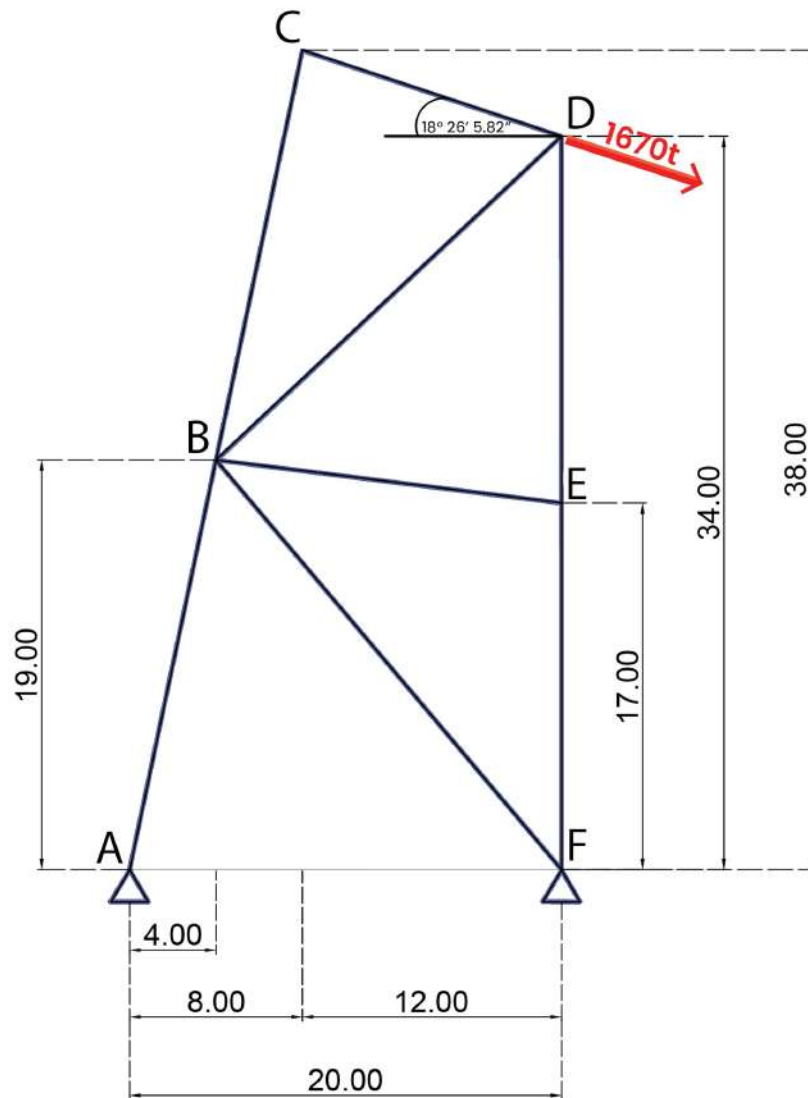












CÁLCULO DE APOYO | TP2: CABLE

