

1 A

$$\begin{aligned}-a_x + f_{-2} + 0.7071067811 f_{-1} &= 0 \\ -a_y + 0.7071067813 f_{-1} &= 0\end{aligned}$$

2 B

$$\begin{aligned}-f_{-2} + f_{-4} + 0.2747312660 f_{-3} &= 0 \\ 0.9615210510 f_{-3} &= 20000\end{aligned}$$

3 C

$$\begin{aligned}-f_{-4} - \cos(0.8981464333) f_{-5} + 0.2873605196 f_{-7} + f_{-8} &= 0 \\ \sin(0.8981464333) f_{-5} + 0.9578224949 f_{-7} &= 20000\end{aligned}$$

4 D

$$\begin{aligned}-f_{-8} - 0.4472127966 f_{-9} + 0.4472127966 f_{-13} + f_{-14} &= 0 \\ 0.8944275905 f_{-9} + 0.8944275905 f_{-13} + f_{-11} &= 20000\end{aligned}$$

5 E

$$\begin{aligned}-f_{-14} - 0.2873605196 f_{-15} + f_{-17} \cos(0.8982511528) + f_{-18} &= 0 \\ 0.9578224949 f_{-15} + f_{-17} \sin(0.8982511528) &= 20000\end{aligned}$$

6 F

$$\begin{aligned}-f_{-18} - 0.2747312660 f_{-19} + f_{-21} &= 0 \\ 0.9615210510 f_{-19} &= 20000\end{aligned}$$

7 G

$$\begin{aligned}-f_{-21} - 0.7071067813 f_{-20} &= 0 \\ c + 0.7071067811 f_{-20} &= 0\end{aligned}$$

8 H

$$\begin{aligned} -0.707 f_{-1} - f_{-3} \cos(1.292486124) + f_{-5} \cos(0.8982511528) + 0.9363 f_{-6} &= 0 \\ -0.707 f_{-1} - f_{-3} \sin(1.292486124) - f_{-5} \sin(0.8982511528) + 0.351 f_{-6} &= 0 \end{aligned}$$

9 J

$$\begin{aligned} -0.9363 f_{-6} - 0.2873605196 f_{-7} + 0.4472127966 f_{-9} + 0.928 f_{-10} &= 0 \\ -0.351 f_{-6} - 0.9578224949 f_{-7} - 0.8944275905 f_{-9} + 0.371 f_{-10} &= 0 \end{aligned}$$

10 L

$$\begin{aligned} -0.928 f_{-10} + 0.928 f_{-12} &= 0 \\ -0.371 f_{-10} - 0.371 f_{-12} - f_{-11} &= 0 \end{aligned}$$

11 K

$$\begin{aligned} 0.9363 f_{-16} + 0.2873605196 f_{-15} - 0.4472127966 f_{-13} - 0.928 f_{-12} &= 0 \\ -0.351 f_{-16} - 0.9578224949 f_{-15} - 0.8944275905 f_{-13} + 0.371 f_{-12} &= 0 \end{aligned}$$

12 I

$$\begin{aligned} 0.707 f_{-20} + f_{-19} \cos(1.292486124) - f_{-17} \cos(0.8982511528) - 0.9363 f_{-16} &= 0 \\ -0.707 f_{-20} - f_{-19} \sin(1.292486124) - f_{-17} \sin(0.8982511528) + 0.351 f_{-16} &= 0 \end{aligned}$$