Engineering Statics: Lab #1

A large truck is stuck on the centerline of Fermor Avenue as shown. A single tow truck is brought in but it cannot move the large truck as shown in Figure1(a). A force of *45 kN* directed along the centerline of Fermor is required to move the large truck. A second tow truck is brought in. The two tow trucks are now attached as shown in Figure 1(b).

Determine the magnitude of the tension in each of the tow cables *AB* and *AC* when the large truck begins to move using,

        a) A graphical solution (state the scale that you use),
        b) Using the parallelogram method;
        c) Using the triangle method.

Figure 1(a)

Lagimodiere Boulevard

Fermor Avenue

Figure 1(b)

8 m

8 m

2 m

8 m

A

B

C