

QUESTION

Figure 1 shows a rectangular frame with a diagonal member. The frame is supported by a pin support at A and a roller support at B. The frame is subjected to a uniformly distributed load of 10 kN/m acting vertically downwards on the top horizontal member. The dimensions of the frame are 4 m by 3 m . The diagonal member is connected to the top-left corner and the bottom-right corner. The frame is shown in Figure 1(a). The frame is shown in Figure 1(b) with the internal forces at the joints. The frame is shown in Figure 1(c) with the internal forces at the joints.



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