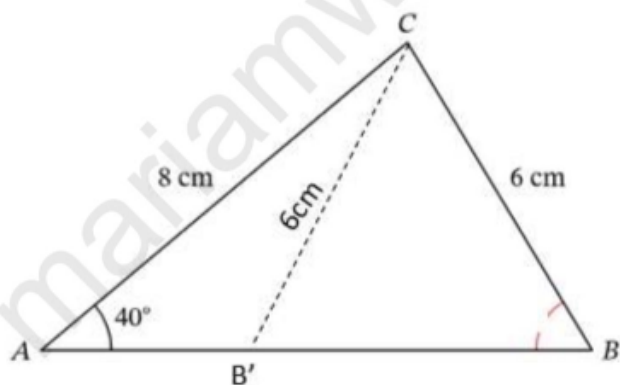
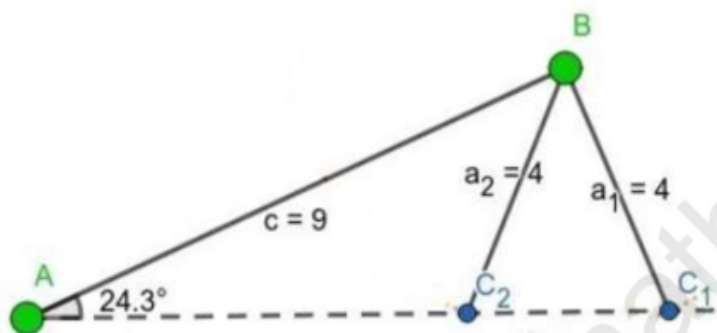


The Ambiguous Case of the Law of Sines states that when using the law of sines to find a missing angle, the possibility of two solutions for the measure of the same angle may occur. This ambiguous case occurs when



- two sides and a non-included angle of a triangle are given.
- the given angle is acute
- the side opposite to the angle is smaller than the other given side





1. In triangle DEF , DF = 10cm , EF = 7cm and $\widehat{EDF} = 34^\circ$.

Find the possible values of

- (i) angle DEF (ii) angle DFE (iii) DE

2. In triangle ABC , AB = 12cm , BC = 10 cm and $\widehat{BAC} = 50^\circ$.

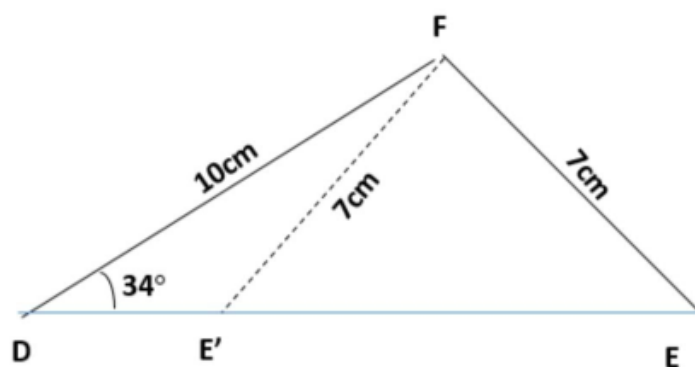
Find the possible values of

- (i) angle ACB (ii) angle ABC (iii) AC

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Answers

- 1) Triangle 1 (i) 53.0 (ii) 93.0 (iii) 12.5
Triangle 2 (i) 127.0 (ii) 10.0 (iii) 4.08



- 2) Triangle 1 (i) 66.8 (ii) 63.2 (iii) 11.7
Triangle 2 (i) 113.2 (ii) 16.8 (iii) 3.78

