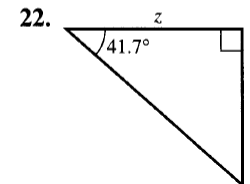
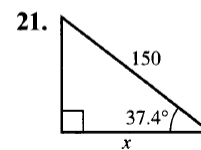
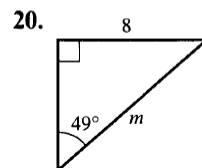
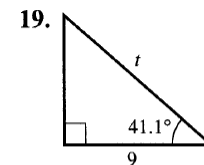
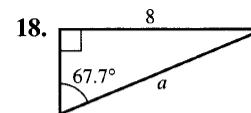
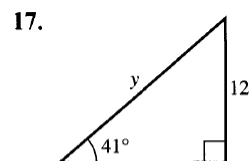
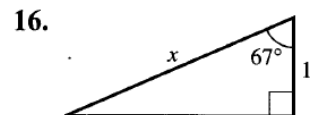
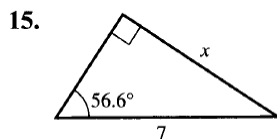
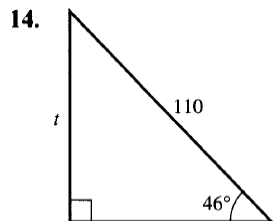
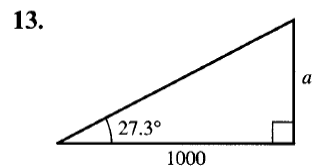
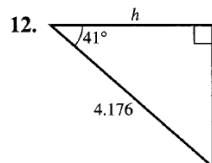
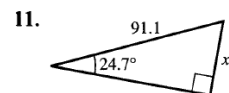
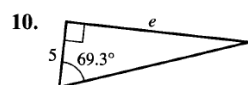
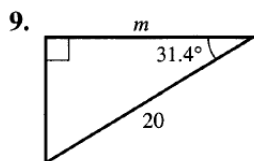
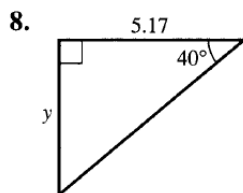
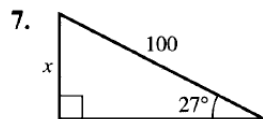
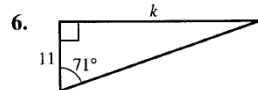
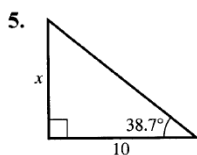
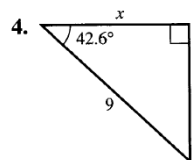
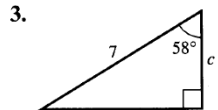
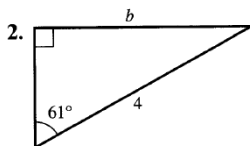
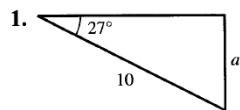


In questions 1 to 22 all lengths are in centimetres. Find the sides marked with letters. Give your answers to three significant figures.



In questions 23 to 34, the triangle has a right angle at the middle letter.

23. In $\triangle ABC$, $\hat{C} = 40^\circ$, $BC = 4$ cm. Find AB .

24. In $\triangle DEF$, $\hat{F} = 35.3^\circ$, $DF = 7$ cm. Find ED .

25. In $\triangle GHI$, $\hat{I} = 70^\circ$, $GI = 12$ m. Find HI .

26. In $\triangle JKL$, $\hat{L} = 55^\circ$, $KL = 8.21$ m. Find JK .

27. In $\triangle MNO$, $\hat{M} = 42.6^\circ$, $MO = 14$ cm. Find ON .

28. In $\triangle PQR$, $\hat{P} = 28^\circ$, $PQ = 5.071$ m. Find PR .

29. In $\triangle STU$, $\hat{S} = 39^\circ$, $TU = 6$ cm. Find SU .

30. In $\triangle VWX$, $\hat{X} = 17^\circ$, $WV = 30.7$ m. Find WX .

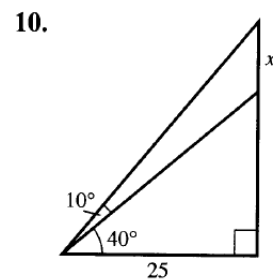
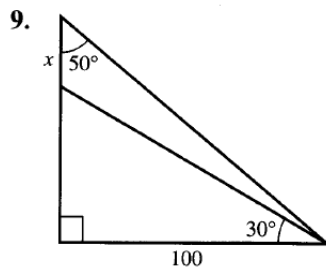
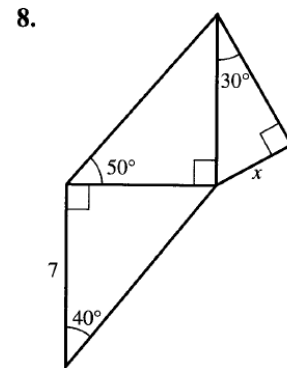
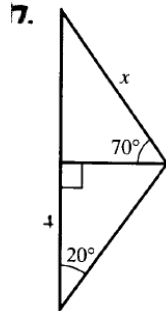
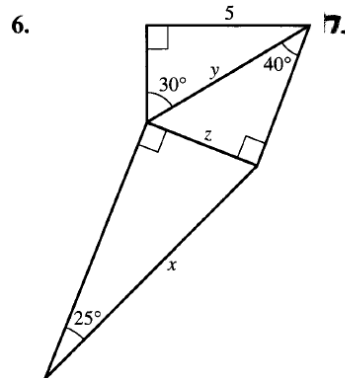
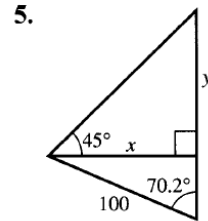
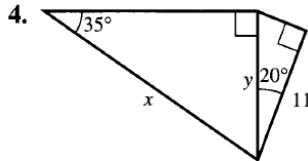
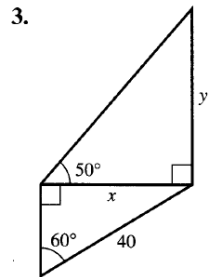
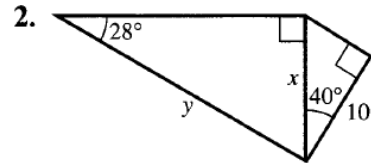
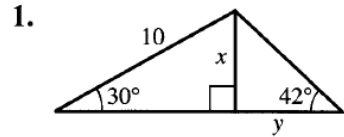
31. In $\triangle ABC$, $\hat{A} = 14.3^\circ$, $BC = 14$ m. Find AC .

32. In $\triangle KLM$, $\hat{K} = 72.8^\circ$, $KL = 5.04$ cm. Find LM .

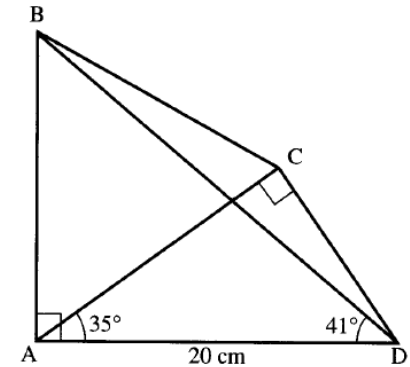
33. In $\triangle PQR$, $\hat{R} = 31.7^\circ$, $QR = 0.81$ cm. Find PR .

34. In $\triangle XYZ$, $\hat{X} = 81.07^\circ$, $YZ = 52.6$ m. Find XY .

In questions 1 to 10, find each side marked with a letter.
All lengths are in centimetres.



11. $\widehat{BAD} = \widehat{ACD} = 90^\circ$
 $\widehat{CAD} = 35^\circ$
 $\widehat{BDA} = 41^\circ$
 $AD = 20 \text{ cm}$
 Calculate:
 (a) AB
 (b) DC
 (c) BD



12. $\widehat{ABD} = \widehat{ADC} = 90^\circ$
 $\widehat{CAD} = 31^\circ$
 $\widehat{BDA} = 43^\circ$
 $AD = 10 \text{ cm}$
 Calculate:
 (a) AB
 (b) CD
 (c) DB

