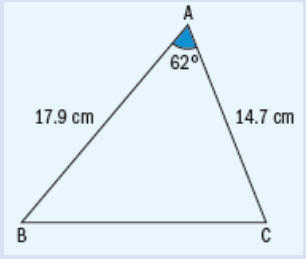
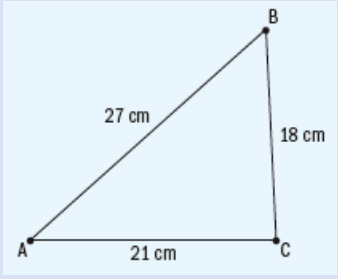
Chapter 11 / **Example 11**

Using the cosine rule

a Find side BC:



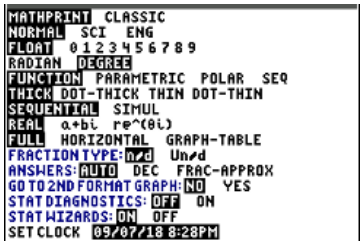
b Find angle *A*:



Press [mode].

Use the [◄] [▲] [►] [▼] keys to place the cursor on DEGREE in the Mode menu, and then press [enter] to highlight it.

Press [2nd] [quit] to return to the home screen.



$a^2 = 14.7^2 + 17.9^2 - 2 \times 14.7 \times 17.9 \cos 62$

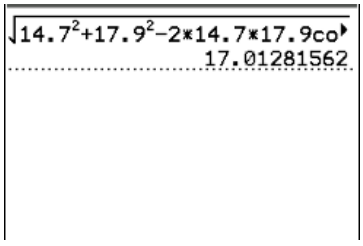
Use your GDC enter the expression $\sqrt{14.7^2 + 17.9^2 - 2 \times 14.7 \times 17.9 \cos 62}$ directly.

Press [2nd] [x²] ([√])

Type 14.7 [x²] [+] 17.9 [x²] [−] 2 [×] 14.7 [×] 17.9 [cos] 62

Close the parentheses and press [enter].

$a = 17.0$

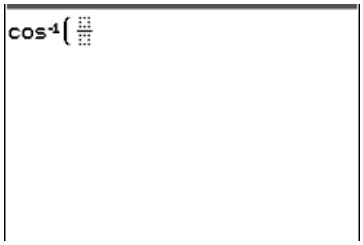


$$\cos A = \frac{21^2 + 27^2 - 18^2}{2 \times 21 \times 27}$$

Use your GDC enter the expression

$$\cos^{-1}\left(\frac{21^2 + 27^2 - 18^2}{2 \times 21 \times 27}\right)$$

Type [2nd] [cos] ([cos⁻¹]) and insert the fraction template by pressing [ALPHA] [f1] 1:n/d



Chapter 11 / **Example 11**

Using the cosine rule

Type 21 x^2 + 27 x^2 − 18 x^2 in the numerator.

Press ▼ to move to the denominator and type 2 × 21 × 27

Press ▶ and close the parentheses.

Press enter.

$A = 41.8°$