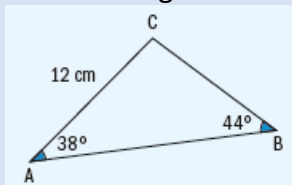


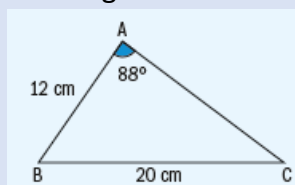
# Chapter 11 / Example 9

## Using the sine rule

**1** Find the length of side BC.



**2** Find angle C.



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.

```
MATHPRINT CLASSIC
NORMAL SCI ENG
FLOAT 0 1 2 3 4 5 6 7 8 9
RADIAN DEGREE
FUNCTION PARAMETRIC POLAR SEQ
THICK DOT-THICK THIN DOT-THIN
SEQUENTIAL SIMUL
REAL a+bi re^(θi)
FULL HORIZONTAL GRAPH-TABLE
FRACTIONTYPE:n/d Un/d
ANSWERS:AUTO DEC FRAC-APPROX
GO TO 2ND FORMAT GRAPH: NO YES
STAT DIAGNOSTICS: OFF ON
STAT WIZARDS: ON OFF
SET CLOCK 09/07/18 8:28PM
```

$$a = \frac{12 \sin 38^\circ}{\sin 44^\circ}$$

Press **[X][X][X][X]** **[f1]** 1:n/d to add a fraction template.

Type 12 **[sin]** 38 in the numerator and close the parentheses.

Press **[↓]** to move to the denominator.

Type sin 44 and close the parentheses. Press **[enter]**.



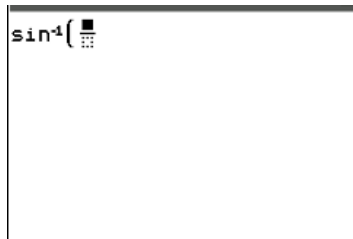
$$a = 10.6 \text{ to 3s.f.}$$

```
12sin(38)
sin(44)
-----
10.63535404
```

$$\sin C = \frac{12 \sin 88}{20}$$

Using your GDC enter the expression  $C = \sin^{-1}\left(\frac{12 \sin 88}{20}\right)$  directly.

Press **[2nd]** **[sin<sup>-1</sup>]** then press **[X][X][X][X]** **[f1]** 1:n/d to add a fraction template.

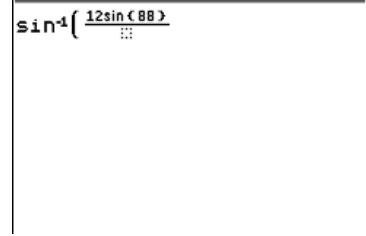


## Chapter 11 / Example 9

# Using the sine rule

Type 12  $\sin$  88 in the numerator

Close the parentheses and then press  $\frac{\Box}{\Box}$  to move to the denominator.

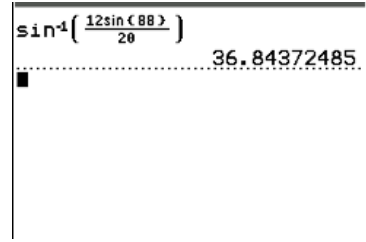


$$\sin^{-1}\left(\frac{12\sin(88)}{\Box}\right)$$

Type 20 Press  $\frac{\Box}{\Box}$  and close the parentheses.

Press  $\text{enter}$ .

$C = 36.8^\circ$



$$\sin^{-1}\left(\frac{12\sin(88)}{20}\right) = 36.84372485$$