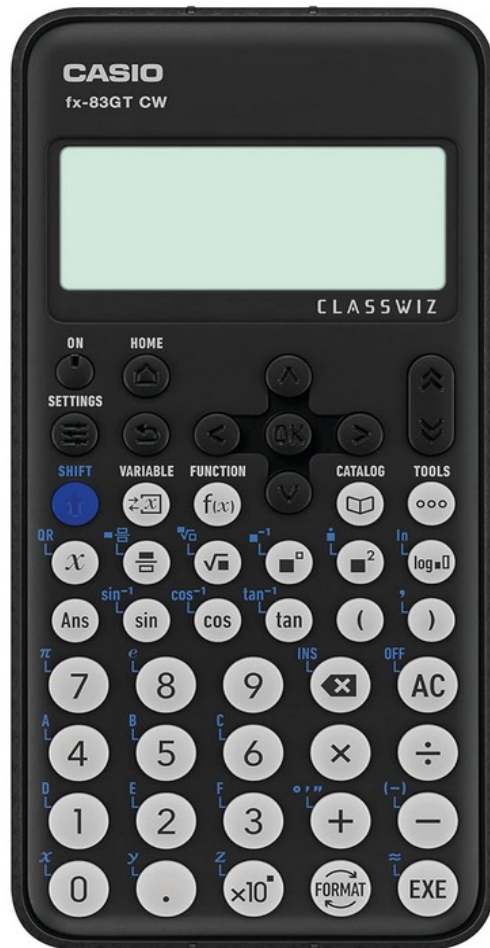


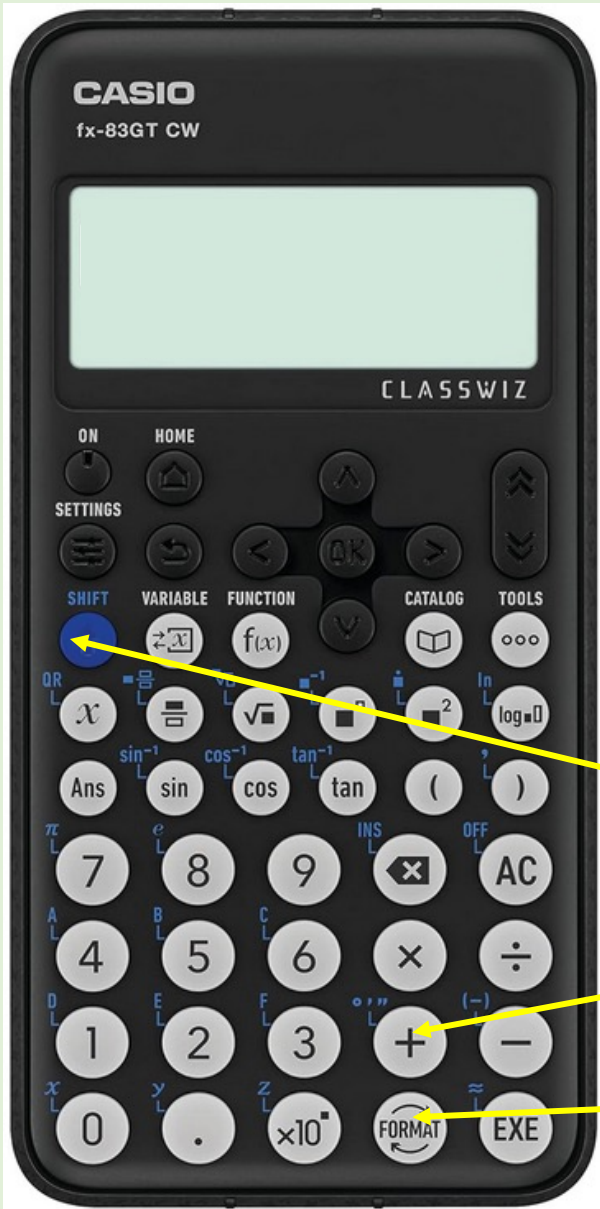
Calculator Tips and Tricks

Please get out your calculator and decide which type you have:

New calculator – round buttons

Original – square buttons





Changing Between Hours and Minutes
and Decimals of Hours

Inputting Hours/Minutes,
press Shift and +
then Format Decimal

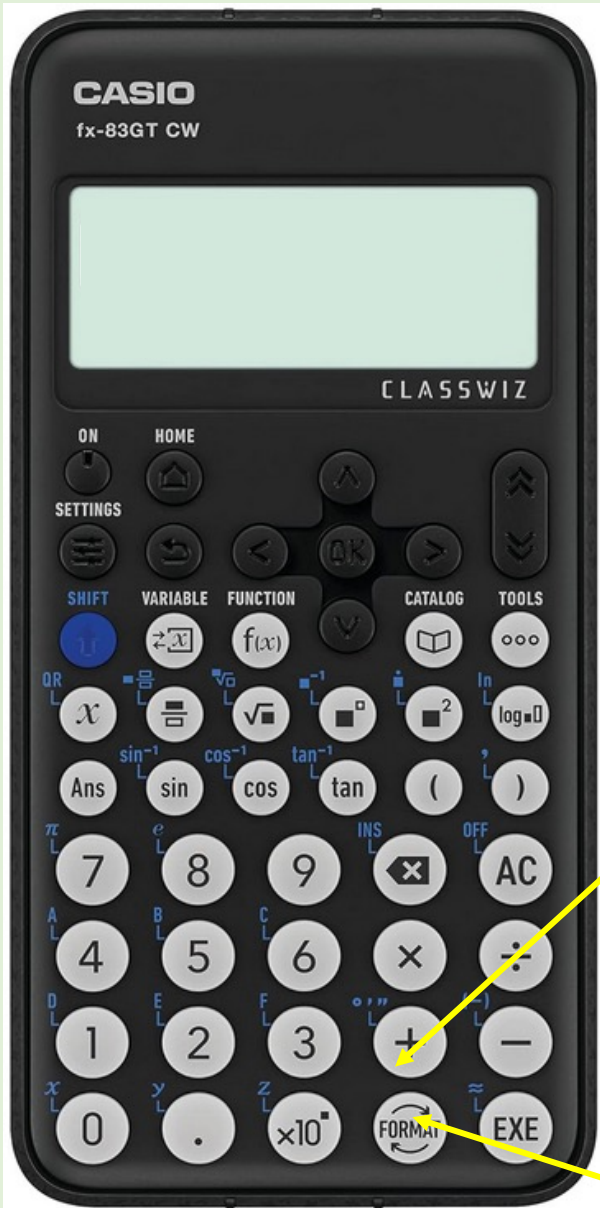
Press Format and choose Sexagesimal

3 hours 25 minutes =

Type $3^{\circ} 25' 0'' =$

$=3.41666667$

Remember to type in the 0 seconds.



Changing Between Decimals of Hours and Hours and Minutes

To change a decimal into hours and minutes,
type in the decimal.

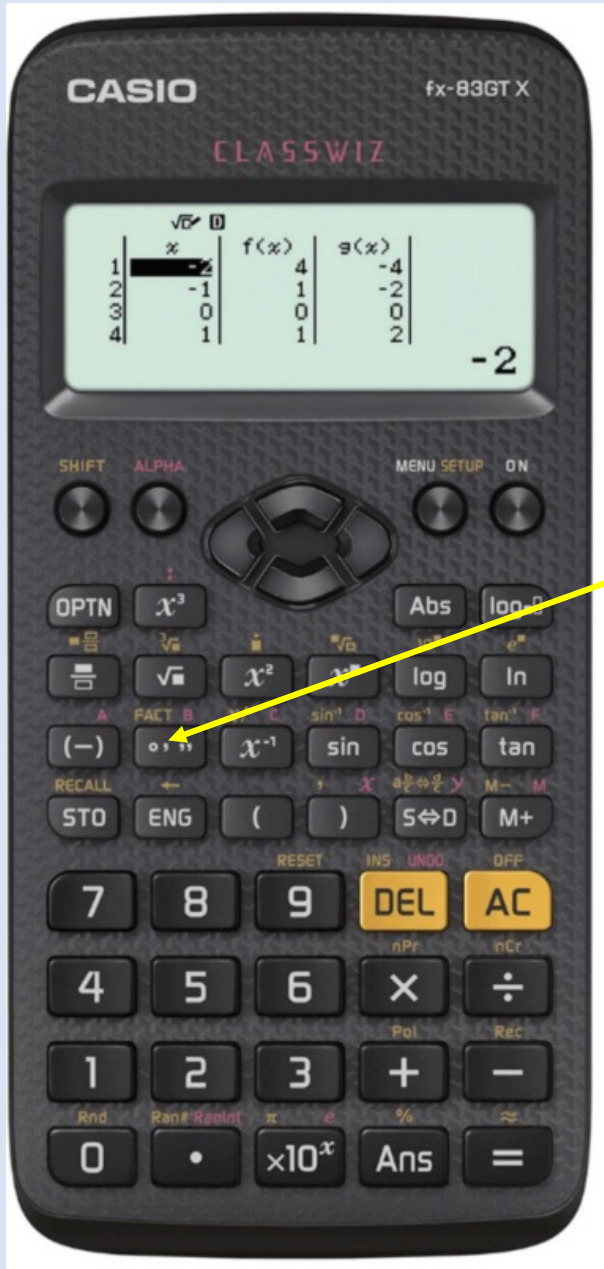
Press Format and choose Sexagesimal

2.75 hours =

2° 45' 0"

Press Exe then Format Sexagesimal
to get an answer in hours and minutes.

Changing Between Hours and Minutes and Decimals of Hours



Type in the hours/minutes/seconds using this button

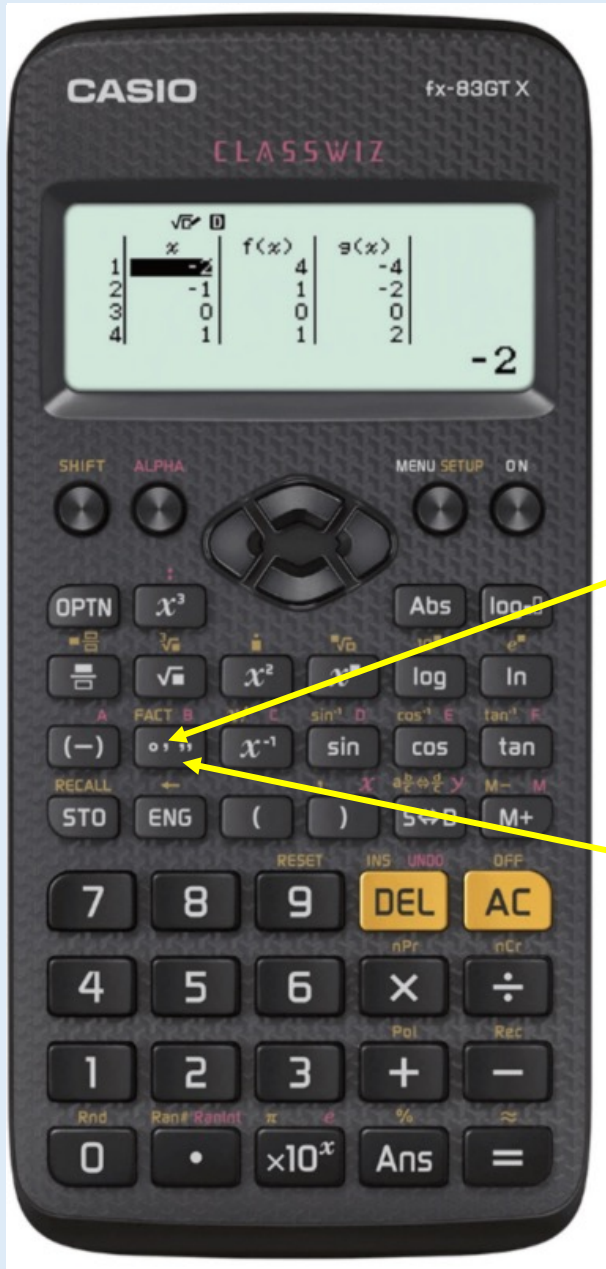
3 hours 25 minutes =

Type $3^{\circ} 25' 0'' =$

Press $S \leftrightarrow D = 3.41666667$

Remember to include the 0 seconds

Changing Between Decimals of Hours and Hours and Minutes



Type in the decimal and then press this button

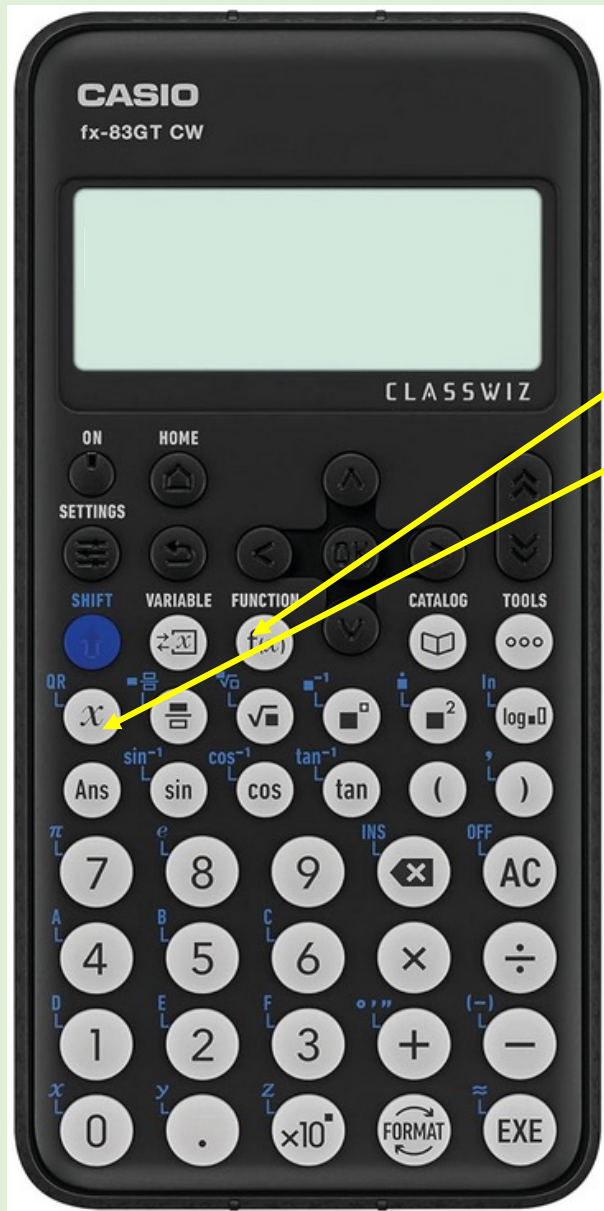
2.75 hours =

Type 2.75 =

Press the time button =

2° 45' 0"

Remember to include the 0 seconds



Tables of Values for Graphs

Function: Define $f(x)$
(x is under the Shift key)

Complete the table for $y = x^2 - 3x$

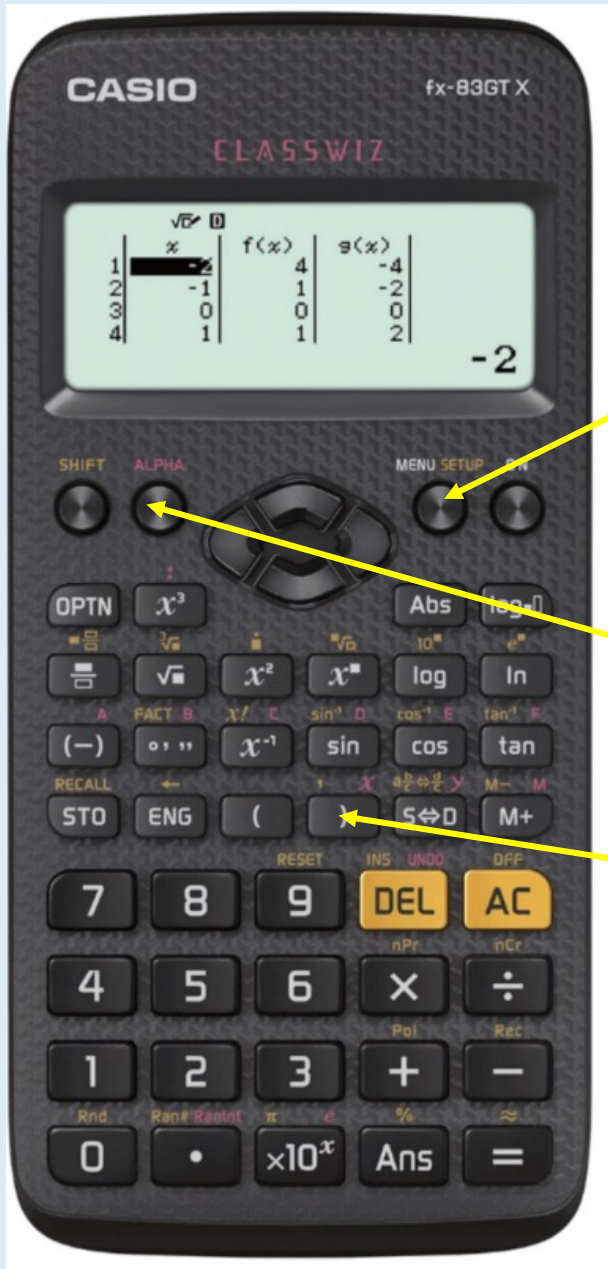
x	-2	-1	0	1	2
y					

10 4 0 - 2 - 2

Then Press Home and Table

Press Tools then Table Range

Start - 2 End 2 Step 1



Tables of Values for Graphs

Press Menu - Table

Complete the table for $y = x^2 - 3x$

x	-2	-1	0	1	2
y					
	10	4	0	-2	-2

Press Menu then Table

$$f(x) = x^2 - 3x \quad (x \text{ is Alpha})$$

Start - 2 End 2 Step 1

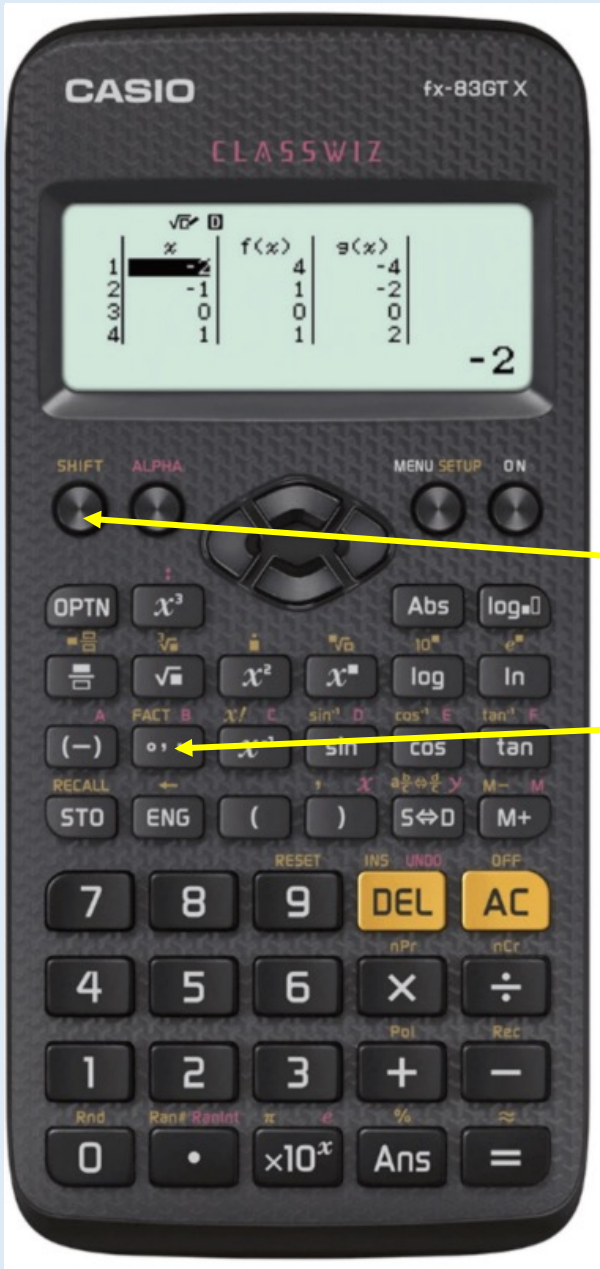
Express 1155 as a product of prime factors

Type 1155 and press =

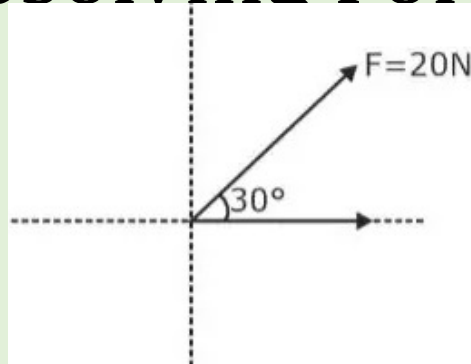
Then press Shift and the time button

$$1155 =$$

$$3 \times 5 \times 7 \times 11$$



Resolving Forces



To change from a force at an angle
to horizontal and vertical

Press Catalogue then Angle/CoOrd

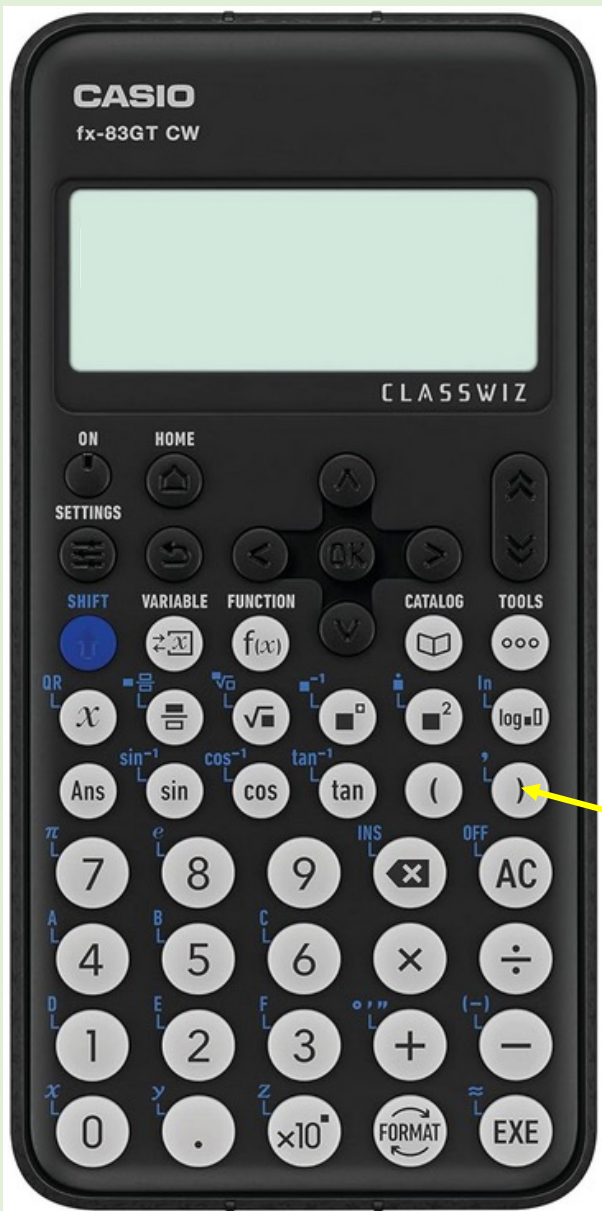
Choose Polar to Rect =

Rec(20, 30)

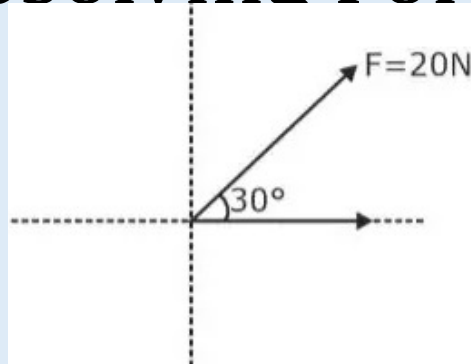
, is Shift and)

$x = 17.32, y = 10$

To go the other way, choose Rect to Polar
and type in the force and the angle



Resolving Forces



To change from a force at an angle to horizontal and vertical

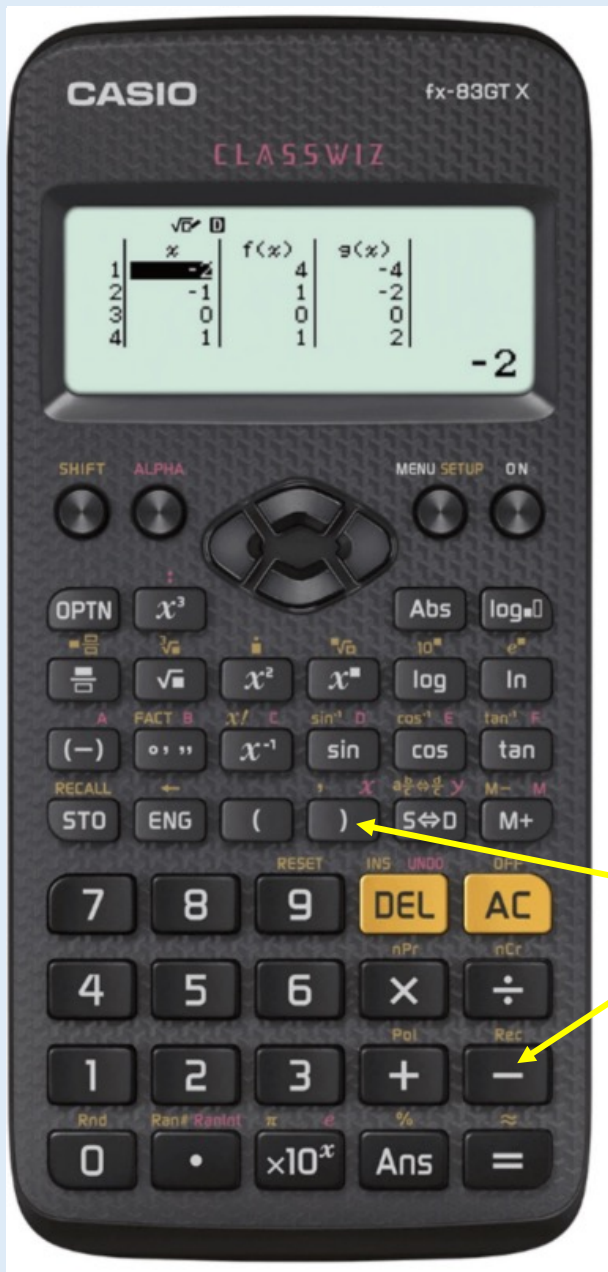
Press Shift and -

$\text{Rec}(20, 30)$

, is Shift and)

$x = 17.32, y = 10$

To go the other way, press Shift and + and type in the force and the angle



Solving Simultaneous Equations

Menu or Home then choose Equation
Simul Equation
2 unknowns

$$x + 3y = 5$$

$$2x - 4y = 7$$

Press Exe; $x = \frac{1}{2}, y = \frac{3}{2}$

Choosing Polynomial will solve quadratic equations and find the minimum point

Solving Quadratic Equations

Menu or Home then choose Equation
Polynomial
Degree 2

$$x^2 - 3x - 4 = 0$$

Press Exe; $x = 1, x = 4$
Min $x = 3/2$, min $y = -25/4$

The “min” is the minimum point on the graph





Solving Quadratic Inequalities

$$\text{Solve } x^2 - 3x - 4 > 0$$

Menu or Home
then choose Inequality
Polynomial Degree 2

$$ax^2 + bx + c > 0$$

Type in 1, -3, -4

Press Exe; $x < 1, 4 < x$

Without writing anything down...

Change 3.4 into a mixed number and an improper fraction

Find $3\frac{2}{7} \div \frac{1}{5}$ as a mixed number and an improper fraction.

Change 2.7 hours into hours and minutes

Change 3 hours 5 minutes into a decimal of an hour

Express 1260 as a product of prime factors

Complete the table of values for $y = x^2 - 3x - 4 = 0$

x	-2	-1	0	1	2
y					

Without writing anything down...

Solve the simultaneous equations $3x + 4y = 5$ and $5x + 6y = -2$

Solve the quadratic equation $3x^2 - 4x - 16 = 0$

Write down the minimum value of $y = 3x^2 - 4x - 16$ and the value of x for which it occurs

Solve the quadratic inequalities

$$x^2 - 5x - 6 > 0$$

$$x^2 + 3x - 4 \leq 0$$