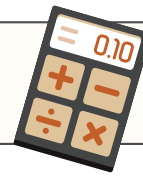


Reading a Calculator Display - Time

ANSWERS



Section A Interpreting Decimals as Time

How we interpret time from a calculator display depends on whether we are working in hours or in minutes. For each calculator display below, interpret as both hours and minutes and then as minutes and seconds.

| Calculator Display | Hours and Minutes | Minutes and Seconds |
|--------------------|------------------------|--------------------------|
| 2.5 | 2 hours and 30 minutes | 2 minutes and 30 seconds |
| 1.25 | 1 hour and 15 minutes | 1 minute and 15 seconds |
| 8.75 | 8 hours and 45 minutes | 8 minutes and 45 seconds |
| 7.3 | 7 hours and 20 minutes | 7 minutes and 20 seconds |
| 10.1 | 10 hours and 6 minutes | 10 minutes and 6 seconds |
| 0.2 | 12 minutes | 12 minutes |
| 3.05 | 3 hours and 3 minutes | 3 minutes and 3 seconds |

What do you notice?

If you are interpreting as hours and minutes the whole number is the number of hours and the decimal represents the minutes (multiply the decimal by 60).

If you are interpreting as minutes and seconds the whole number represents the minutes and the decimal represents the seconds.

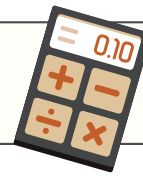
Section B Interpreting Fractions as Time

For each calculator display below, interpret as hours and minutes.

| Calculator Display | Hours and Minutes |
|--------------------|-------------------------|
| $6\frac{3}{4}$ | 6 hours and 45 minutes |
| $4\frac{3}{2}$ | 4 hours and 30 minutes |
| $4\frac{1}{3}$ | 4 hours and 20 minutes |
| $74\frac{2}{3}$ | 74 hours and 40 minutes |
| $2\frac{3}{5}$ | 2 hours and 36 minutes |

Reading a Calculator Display - Time

ANSWERS



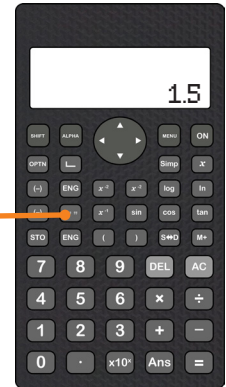
Section C Calculator functions

Did you know your calculator can convert from decimals and fractions to hours, minutes and seconds?

Enter 1.5 into your calculator, followed by the degrees, minutes and seconds button (in the orange circle).

What answer do you get?

1°30'0"



We know that 1.5 hours is 1 hour and 30 minutes. Think about how the display shows this.

Now convert the following decimals and fractions to hours, minutes and seconds using the time conversion button.

| | | |
|--|--|--|
| 1) 5.55 5 hours and 33 minutes | 4) 0.01 36 seconds | 7) $\frac{3}{8}$ 22 minutes and 30 seconds |
| 2) 0.8 48 minutes | 5) 4.26 4 hours, 15 minutes and 36 seconds | 8) $9\frac{5}{9}$ 9 hours, 33 minutes and 20 seconds |
| 3) 2.3 2 hours and 18 minutes | 6) $2\frac{7}{12}$ 2 hours and 35 minutes | 9) $1\frac{13}{20}$ 1 hour and 39 minutes |

We can also use this button to convert from time in hours, minutes and seconds to a number of hours, which is useful when calculating speed.

For example, what is 10 hours 24 minutes in hours?

$$10 \text{ } \boxed{\circ' ' ' ' } 24 \text{ } \boxed{\circ' ' ' ' } = \boxed{\text{S} \rightarrow \text{D}} = 10.4 \text{ hours}$$

Now convert these times in hours and minutes to hours using the time conversion function on your calculator.

| | | |
|--|-----------------------------------|---|
| 1) 4 hours and 15 minutes 4.25 hours | 2) 36 minutes 0.6 hours | 3) 2 hours and 36 minutes 2.6 hours |
|--|-----------------------------------|---|