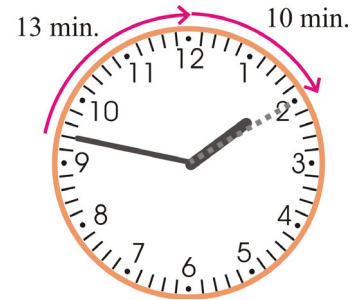


Elapsed Time 1

How many minutes is it from 1:47 to 2:10?

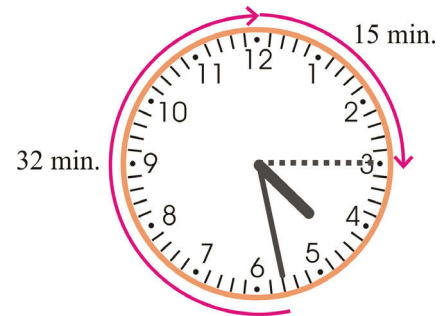
Notice that the hour changes from 1 to 2. We need to calculate this carefully, but it is easy when you calculate it in two parts:

From 1:47 to 2:00 is 13 minutes. From 2:00 to 2:10 is 10 minutes. So the total is 23 minutes.

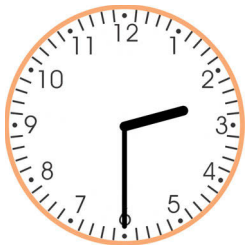


How many minutes is it from 16:28 to 17:15?

Again, the hour changes, so we figure it in two parts: From 16:28 to 17:00 is 32 minutes. From 17 to 17:15 is 15 minutes. The total is: $32 + 15 = 47$ minutes.



1. How many minutes is it from the time on the clock face until the given time?



until 3:15

a. _____ minutes



until 11:25

b. _____ minutes



until 4:05

c. _____ minutes



until 1:30

d. _____ minutes



until 17:05

e. _____ minutes



until 4:23

f. _____ minutes



until 22:18

g. _____ minutes

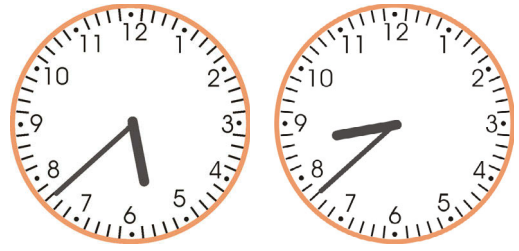


until 12:10

h. _____ minutes

How much time passes from 5:38 to 8:38?

The minutes are the same (:38), so the minute hand has made some full rounds—full hours—and ended up back in the same place. So you need to only look at the *difference in the hours*: From 5 to 8 is 3 hours. Three hours have passed.



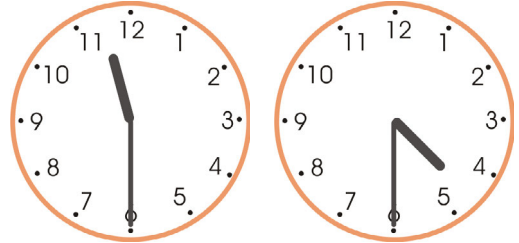
How much time passes from 11:30 AM to 4:30 PM?

Once again, the minute hand has made several full rounds. From 11 to 4 is five hours.

You can also figure the passed time in parts:

- (1) From 11:30 to 12:00 is half an hour.
- (2) From 12:00 to 4:00 is four more hours.
- (3) From 4:00 to 4:30 is another half an hour.

The total is five hours.



2. How much time passes during these intervals?

a. From 02:06 to 10:06	b. From 08:25 to 12:25	c. From 15:30 to 18:00
d. From 7:30 AM to 1:30 PM	e. From 10:00 AM to 3:30 PM	f. From 21:49 to 01:49
g. From 5 AM to 5 PM	h. From 11 PM to 12 noon	i. From 6 AM to 4 PM

3. Find the elapsed time in parts.

a. From 1:40 PM to 2:30 PM

From 1:40 till 2:00	_____ minutes
From 2 till 2:30	_____ minutes
Total	

b. From 7:30 AM to 3:10 PM

From 7:30 to 8:00	
From 8:00 to 12:00	
From 12:00 to 3:00	
From 3:00 to 3:10	
Total	