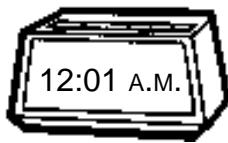
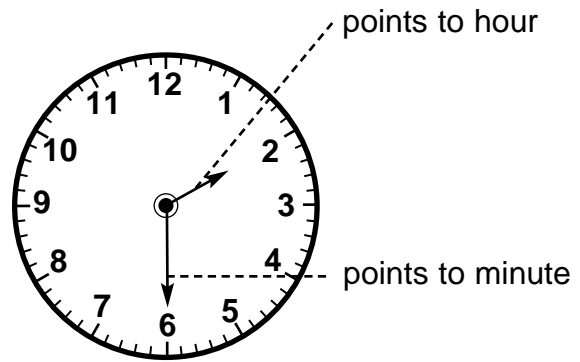
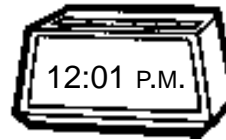


Facts to Know

- There are 60 seconds in 1 minute.
- There are 60 minutes in 1 hour.
- There are 24 hours in 1 day.
- Time is measured on a clock in 12-hour segments.
- The short hand points to the hour. The long hand points to the minute.
- Morning—A.M.—includes the hours from midnight to noon, from 12:00 A.M. through 11:59 A.M.
- Afternoon—P.M.—includes the hours from noon to midnight. The afternoon time is from 12:00 P.M. through 11:59 P.M.



one minute
after midnight



one minute
after noon

Computing Time

To compute elapsed time within the morning, subtract the smaller number from the higher one. Computing time within the afternoon is done the same way.

The time from 7:15 A.M. to 10:30 A.M.
is done this way:

$$\begin{array}{r} 10:30 \\ - 7:15 \\ \hline 3:15 \text{ (3 hours and 15 minutes)} \end{array}$$

The time from 6:35 P.M. to 9:00 P.M.
is done this way:

$$\begin{array}{r} 9:00 \\ - 6:35 \\ \hline 2:25 \text{ (2 hours and 25 minutes)} \end{array}$$

When going from A.M. to P.M. or from P.M. to A.M., you regroup 60 minutes (not 10 or 100).

The time from 9:00 P.M. to 6:30 A.M. is computed this way:

Step 1

$$\begin{array}{r} 12:00 \text{ midnight} \\ - 9:00 \\ \hline 3:00 \text{ hrs.} \end{array}$$

Step 2

$$\begin{array}{r} 3:00 \text{ (Add)} \\ + 6:30 \text{ (12:00 midnight to 6:30 A.M. is 6 hrs. and 30 min.)} \\ \hline 9:30 \text{ (9 hours and 30 minutes)} \end{array}$$

How long is it from 10:00 A.M. to 2:30 P.M.?

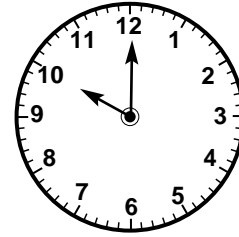
Subtract 10:00 from 12:00. This equals 2 hours.

2:30 P.M. is 2 ½ hours after noon.

Add 2 hours + 2 ½ hours = 4 ½ hours.

The answer is 4 ½ hours.

$$\begin{array}{r} 12:00 \\ - 10:00 \\ \hline 2:00 \\ + 2:30 \\ \hline 4:30 \end{array}$$



Directions: Use the information on page 37 to help you compute these times.

How much time is there between:

1. 7:00 A.M. and 10:15 A.M.

2. 3:00 A.M. and 6:45 A.M.

3. 9:00 P.M. and 11:30 P.M.

4. 6:00 P.M. and 10:45 P.M.

5. 8:15 A.M. and 11:50 A.M.

6. 4:15 P.M. and 10:40 P.M.

7. 7:30 A.M. and 10:00 A.M.

8. 4:30 P.M. and 11:00 P.M.

9. 3:45 P.M. and 6:00 P.M.

10. 8:55 A.M. and 10:00 A.M.

11. 7:45 P.M. and 10:15 P.M.

12. 2:30 A.M. and 8:00 A.M.

13. 9:45 A.M. and 12:00 noon

14. 7:50 P.M. and 12:00 midnight

Directions: Try these. Remember to borrow 60 minutes (not 10 or 100) when you need to borrow time.

15. 10:00 A.M. and 1:00 P.M.

16. 7:00 A.M. and 3:00 P.M.

17. 9:00 P.M. and 4:00 A.M.

18. 11:00 P.M. and 6:30 A.M.

19. 4:00 P.M. and 5:00 A.M.

20. 8:00 A.M. and 6:45 P.M.

Challenge: How much time is there between 5:36 P.M. and 11:52