

Clockwise Time Quest

Find starts, ends, and elapsed time.

GRADE 4 • 4.MG.2

4.MG.2 "The student will solve single-step and multistep contextual problems involving elapsed time (limited to hours and minutes within a 12-hour period)."

NAME _____

DATE _____

BREAK TIME INTO PARTS

To find elapsed time, count from the start time to the next hour, then count full hours and extra minutes. To find an ending time, move forward. To find a starting time, move backward.

WORKED EXAMPLE

A show starts at 2:16 p.m. and ends at 4:43 p.m. How long is the show?

1. 16 p.m. to 3:00 p.m. is 44 minutes.
2. 00 p.m. to 4:00 p.m. is 1 hour.
3. 00 p.m. to 4:43 p.m. is 43 minutes.
4. 44 minutes + 1 hour + 43 minutes = 2 hours 27 minutes.

Answer: 2 hours 27 minutes

PRACTICE 6 problems

- 1** A science video starts at 6:12 a.m. and ends at 9:39 a.m. How long is the video?

ANSWER _____

- 2** A game begins at 7:26 p.m. and lasts 3 hours 19 minutes. What time does it end?

ANSWER _____

- 3** A bus arrives at 8:14 a.m. after a ride lasting 1 hour 36 minutes. What time did the ride begin?

ANSWER _____

- 4** A museum visit starts at 11:48 a.m. and ends at 1:17 p.m. How long is the visit?

ANSWER _____

- 5** A timer begins at 9:33 a.m. It runs for 46 minutes, pauses for 17 minutes, and then runs for 1 hour 24 minutes. What time does the timer finish?

ANSWER _____

- 6** A class starts at 10:41 a.m. and ends at 12:09 p.m. How long is the class?

ANSWER _____

APPLY IT Show your work

- 1** A school basketball game begins at 10:36 a.m. The first half lasts 41 minutes, halftime lasts 13 minutes, and the second half lasts 41 minutes. What time does the game end?

WORK SPACE

ANSWER _____

- 2** A live animal camera stream ends at 8:22 p.m. Maya watched for 37 minutes, took a 16-minute snack break, and then watched for 1 hour 28 minutes. What time did Maya begin watching?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Library game night begins at 11:37 a.m. There are three rounds that last 28 minutes each and two breaks that last 17 minutes each. What time does game night end? Explain how you found the total time.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A science video starts at 6:12 a.m. and ends at 9:39 a.m. How long is the video?	3 hours 27 minutes
2	A game begins at 7:26 p.m. and lasts 3 hours 19 minutes. What time does it end?	10:45 p.m.
3	A bus arrives at 8:14 a.m. after a ride lasting 1 hour 36 minutes. What time did the ride begin?	6:38 a.m.
4	A museum visit starts at 11:48 a.m. and ends at 1:17 p.m. How long is the visit?	1 hour 29 minutes
5	A timer begins at 9:33 a.m. It runs for 46 minutes, pauses for 17 minutes, and then runs for 1 hour 24 minutes. What time does the timer finish?	12:00 p.m.
6	A class starts at 10:41 a.m. and ends at 12:09 p.m. How long is the class?	1 hour 28 minutes

PART 2 • APPLY IT

- 12:11 p.m.** Add the two halves and halftime: $41 + 13 + 41 = 95$ minutes, or 1 hour 35 minutes. Add 1 hour 35 minutes to 10:36 a.m.
- 6:01 p.m.** The total time is 37 minutes + 16 minutes + 1 hour 28 minutes = 2 hours 21 minutes. Count back 2 hours 21 minutes from 8:22 p.m.

CHALLENGE

1:35 p.m.; $28 + 28 + 28 + 17 + 17 = 118$ minutes, which is 1 hour 58 minutes. Add 1 hour 58 minutes to 11:37 a.m.

Accept equivalent duration forms such as 1 hour 29 minutes or 1 h 29 min. Require a.m. or p.m. when students give a clock time, and accept noon for 12:00 p.m.