WONDERLEARNERZ PRIMARY ACADEMY â€" OFFICIAL ANSWER KEY & MARKING SCHEME

Time and Clocks - Worksheet 3 [ANSWER KEY]

Grade 4 | Mathematics | Ch 15: Time and Clocks | Total Marks: 19 | Time: 30 Minutes

Q1. How many minutes are there in 3 hours? [1 Mark]

Correct Answer: 180 minutes

Explanation: 3 hours x 60 minutes/hour = 180 minutes.

Q2. If the minute hand points to 8 on an analog clock, how many minutes past the hour [1 Mark]
does it show?

Correct Answer: 40 minutes

Explanation: Each number represents 5 minutes: 8 x 5 = 40 minutes.

Q3. How many seconds are in 5 minutes? [1 Mark]

Correct Answer: 300 seconds

Explanation: 5 minutes x 60 seconds/minute = 300 seconds.

Q4. Convert 75 minutes into hours and minutes: [1 Mark]

Correct Answer: 1 hour 15 minutes

Explanation: 75 minutes = 1 hour and 15 minutes.

Q5. At the Sports Day Championship, an event starts at 1:45 and lasts for 75 minutes. [1 Mark]
What time does it conclude?

Correct Answer: 3:00

Explanation: 1:45 + 75 minutes = 3:00.

Q6. Liam begins doing his homework at 4:35 PM and finishes at 5:20 PM. How long did he [1 Mark]
spend on his homework?

Correct Answer: 45 minutes

Explanation: From 4:35 to 5:00 is 25 minutes. From 5:00 to 5:20 is 20 minutes. 25 + 20 = 45 minutes.

Q7. A movie starts at 6:15 PM and ends at 8:30 PM. What was the total running time of [1 Mark]
the movie?

Correct Answer: 2 hours 15 minutes

Explanation: From 6:15 to 8:15 is 2 hours. From 8:15 to 8:30 is 15 minutes. Total = 2 hours 15 minutes.

Q8. Find the missing value: 2 hours and [?] minutes = 145 minutes. [1 Mark]

Correct Answer: 25 minutes

Explanation: 2 hours = 120 minutes. 145 - 120 = 25 minutes.

Q9. Start time: 9:15 AM. Elapsed time: 1 hour 40 minutes. End time: [?] [1 Mark]

Correct Answer: 10:55 AM

Explanation: 9:15 + 1 hour = 10:15. 10:15 + 40 minutes = 10:55 AM.

Q10. Sam says: 'The clock shows 15 minutes before 7, so the digital time is 7:45.' [1 Mark]
What is Sam's error?

Correct Answer: 15 minutes before 7 means 6:45, not 7:45

Explanation: 15 minutes before 7 is in the 6 o'clock hour (6:45). 7:45 is quarter to 8.

Q11. Zoe calculates the duration between 1:50 PM and 2:10 PM as 60 minutes because 50 [1 Mark]
+ 10 = 60. What is the actual elapsed time?

Correct Answer: 20 minutes

Explanation: From 1:50 to 2:00 is 10 minutes. From 2:00 to 2:10 is 10 minutes. 10 + 10 = 20 minutes.

Q12. Why does an analog clock's minute hand move 12 times faster than its hour hand? **[2 Marks]**

Correct Answer: The minute hand makes a full circle (60 min) in 1 hour, while the hour hand takes 12 hours to complete a circle

Explanation: In 1 hour, the minute hand travels 360Â° while the hour hand travels 30Â° (360 / 30 = 12 times faster).

Q13. If the time is exactly 9:00 AM, what is the angle formed between the hour hand and the minute hand? **[2 Marks]**

Correct Answer: A right angle (90Â°)

Explanation: At 9:00, the minute hand points to 12 and the hour hand to 9, creating an exact 90Â° right angle.

Q14. An airplane takes off at 11:45 AM on a flight lasting 3 hours and 35 minutes. At what time does it land? **[2 Marks]**

Correct Answer: 3:20 PM

Explanation: 11:45 AM + 15 min = 12:00 PM. Remaining time: 3 hours 20 minutes. 12:00 PM + 3 h 20 min = 3:20 PM.

Q15. A runner completes 4 laps of a track. Each lap takes 2 minutes and 45 seconds. What is the runner's total time in minutes and seconds? **[2 Marks]**

Correct Answer: 11 minutes 0 seconds

Explanation: 4 x 2 min = 8 min. 4 x 45 s = 180 s = 3 min. 8 min + 3 min = 11 minutes 0 seconds.