



# Year 4 Mathematics

## Worksheet 39: Clocks, am/pm & Duration

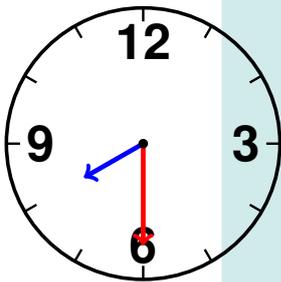
Australian Curriculum v9.0 — AC9M4M03

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Section 1: Fluency — Reading Analog and Digital Time

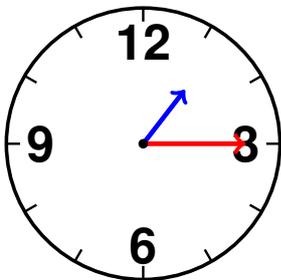
Read the clocks carefully and write the time shown. Remember to include am or pm.

1. Look at this analog clock. What time does it show?



Time: \_\_\_\_\_

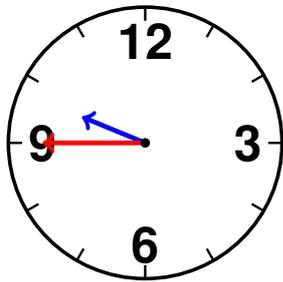
2. What time is shown on this analog clock?



Time: \_\_\_\_\_



3. This analog clock shows a time in the morning. Write the time with am.



Time: \_\_\_\_\_

4. You are eating breakfast. Is this 7:30 am or 7:30 pm?

Answer: \_\_\_\_\_

5. You are getting ready for bed. Is this 8:00 am or 8:00 pm?

Answer: \_\_\_\_\_

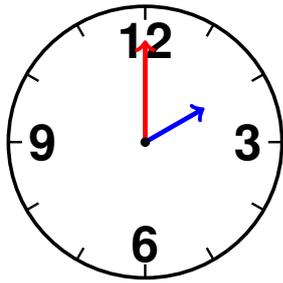
6. Write the digital time for quarter past three in the afternoon.

Answer: \_\_\_\_\_

7. Write the digital time for half past eleven in the morning.

Answer: \_\_\_\_\_

8. What time is shown? (Hint: The short hand is the hour, the long hand is the minute.)



Time: \_\_\_\_\_

### Reward Box



### Time Titan!

*Why did the clock go to the principal's office?  
Because it kept tocking back!*

### Section 2: Reasoning — Duration and Time Problems

**Solve these problems about how long activities take. Show your working.**

**9.** A soccer game starts at 10:30 am and lasts 45 minutes. What time does it finish?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**10.** School starts at 8:50 am. Morning tea is at 11:00 am. How many minutes pass between the start of school and morning tea?

Working: \_\_\_\_\_



Answer: \_\_\_\_\_ minutes

**11.** A movie starts at 2:15 pm and finishes at 4:00 pm. How long is the movie?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**12.** The bus leaves at 3:45 pm. If you need to arrive 10 minutes early, what time should you get to the bus stop?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**13.** Lunch starts at 12:30 pm and ends at 1:15 pm. How many minutes is lunch?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ minutes

**14.** A train journey takes 1 hour and 20 minutes. If the train leaves at 9:15 am, when will it arrive?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**15.** Swimming lessons are 30 minutes long. They start at 4:10 pm. What time do they finish?

Working: \_\_\_\_\_



Answer: \_\_\_\_\_

### Reward Box



### Calendar Clever!

*What did the digital clock say to its mother?*

*"Look, Ma! No hands!"*

### Section 3: Fluency — Understanding am and pm

**Think about when activities happen during the day and night.**

16. Is 12:15 pm in the middle of the day or the middle of the night?

Answer: \_\_\_\_\_

17. Is 12:15 am in the middle of the day or the middle of the night?

Answer: \_\_\_\_\_

18. You watch the sunset at 7:30 pm. Five hours later, what time is it?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

19. Which comes first in the day: 6:00 am or 6:00 pm?

Answer: \_\_\_\_\_



20. Your family eats dinner at 6:30. Is this am or pm?

Answer: \_\_\_\_\_

21. The sun rises at 6:15. Is this am or pm?

Answer: \_\_\_\_\_

22. A night movie starts at 8:45. Is this am or pm?

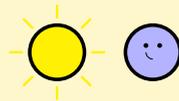
Answer: \_\_\_\_\_

23. If it's 11:30 am now, how many hours until 3:30 pm?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ hours

### Reward Box



### Time Titan!

*Why did the student bring a ladder to school?*

*Because they wanted to reach "high" noon!*

**End of Worksheet 39 — Well Done!**



# Year 4 Mathematics

## Worksheet 39: Answer Key

Clocks, am/pm & Duration

### Section 1: Fluency — Reading Analog and Digital Time

#### Answers with explanations

1. Time: **7:30** (or 7:30 am/pm depending on context)

*Explanation: The hour hand points to 7, and the minute hand points to 6, which represents 30 minutes.*

2. Time: **2:15** (or 2:15 am/pm depending on context)

*Explanation: The hour hand is between 2 and 3, and the minute hand points to 3, which represents 15 minutes.*

3. Time: **9:45 am**

*Explanation: The hour hand is between 9 and 10 (closer to 10), and the minute hand points to 9, which represents 45 minutes. Since it's morning, we use am.*

4. Answer: **7:30 am**

*Explanation: Breakfast is eaten in the morning, so we use am.*

5. Answer: **8:00 pm**

*Explanation: Getting ready for bed happens in the evening, so we use pm.*

6. Answer: **3:15 pm**

*Explanation: Quarter past means 15 minutes past the hour. Afternoon is pm.*

7. Answer: **11:30 am**

*Explanation: Half past means 30 minutes past the hour. Morning is am.*

8. Time: **4:00** (or 4:00 am/pm depending on context)



*Explanation: The hour hand points to 4, and the minute hand points to 12, indicating exactly 4 o'clock.*

## Section 2: Reasoning — Duration and Time Problems

### Worked solutions

**9. Answer: 11:15 am**

*Working:  $10:30 \text{ am} + 45 \text{ minutes} = 10:30 \text{ am} + 30 \text{ minutes} + 15 \text{ minutes} = 11:00 \text{ am} + 15 \text{ minutes} = 11:15 \text{ am}$*

**10. Answer: 130 minutes** (or 2 hours and 10 minutes)

*Working: From 8:50 am to 9:00 am = 10 minutes; from 9:00 am to 11:00 am = 2 hours = 120 minutes. Total:  $10 + 120 = 130$  minutes.*

**11. Answer: 1 hour and 45 minutes** (or 105 minutes)

*Working: From 2:15 pm to 3:00 pm = 45 minutes; from 3:00 pm to 4:00 pm = 1 hour. Total: 1 hour and 45 minutes.*

**12. Answer: 3:35 pm**

*Working:  $3:45 \text{ pm} - 10 \text{ minutes} = 3:35 \text{ pm}$*

**13. Answer: 45 minutes**

*Working: From 12:30 pm to 1:00 pm = 30 minutes; from 1:00 pm to 1:15 pm = 15 minutes. Total:  $30 + 15 = 45$  minutes.*

**14. Answer: 10:35 am**

*Working:  $9:15 \text{ am} + 1 \text{ hour} = 10:15 \text{ am}$ ;  $10:15 \text{ am} + 20 \text{ minutes} = 10:35 \text{ am}$*

**15. Answer: 4:40 pm**

*Working:  $4:10 \text{ pm} + 30 \text{ minutes} = 4:40 \text{ pm}$*

## Section 3: Fluency — Understanding am and pm

### Answers with reasoning



**16. Answer: Middle of the day**

*Explanation: 12:00 pm is noon (midday), so 12:15 pm is just after noon, in the middle of the day.*

**17. Answer: Middle of the night**

*Explanation: 12:00 am is midnight, so 12:15 am is just after midnight, in the middle of the night.*

**18. Answer: 12:30 am**

*Working:  $7:30 \text{ pm} + 5 \text{ hours} = 12:30 \text{ am}$  (crosses from pm to am at midnight)*

**19. Answer: 6:00 am**

*Explanation: am comes before pm in a day. 6:00 am is morning; 6:00 pm is evening.*

**20. Answer: pm**

*Explanation: Dinner is typically eaten in the evening, which is pm.*

**21. Answer: am**

*Explanation: The sun rises in the morning, which is am.*

**22. Answer: pm**

*Explanation: A night movie starts in the evening/night, which is pm.*

**23. Answer: 4 hours**

*Working: From 11:30 am to 12:30 pm = 1 hour; from 12:30 pm to 3:30 pm = 3 hours. Total:  $1 + 3 = 4$  hours.*

## Outstanding Achievement!

*You have mastered reading clocks, understanding am/pm notation, and calculating time durations. These are essential skills for managing your daily schedule!*



# Year 4 Mathematics

## Worksheet 40: Calendars & Time Conversions

Australian Curriculum v9.0 — AC9M4M03

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Section 1: Fluency — Converting Units of Time

Convert between different units of time. Show your working.

1. How many minutes are in 2 hours and 15 minutes?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ minutes

2. Convert 180 seconds into minutes.

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ minutes

3. How many seconds are in 5 minutes?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ seconds

4. Convert 21 days into weeks.

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ weeks



5. How many days are in 4 weeks?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ days

6. Convert 150 minutes into hours and minutes.

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

7. How many hours are in 3 days?

Working: \_\_\_\_\_

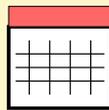
Answer: \_\_\_\_\_ hours

8. Convert 90 seconds into minutes and seconds.

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

### Reward Box



### Calendar Clever!

*What do you call a month with 28 days?*

*All of them!*



## Section 2: Visual Modeling — Reading a Calendar

Use the calendar below to answer the questions.

October 2026

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

9. If today is Tuesday the 5th, what date is the next Tuesday?

Answer: \_\_\_\_\_

10. How many Saturdays are in October 2026?

Answer: \_\_\_\_\_ Saturdays

11. What day of the week is October 15th?

Answer: \_\_\_\_\_

12. If your birthday is on October 20th, what day of the week is it?

Answer: \_\_\_\_\_

13. How many days are between October 5th and October 19th (not including these dates)?



Working: \_\_\_\_\_

Answer: \_\_\_\_\_ days

**14.** If a library book is due on October 8th and you return it on October 22nd, how many days late is it?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ days

**15.** What is the date of the last Sunday in October?

Answer: \_\_\_\_\_

### Reward Box



### Time Titan!

*Why did the calendar look so popular?*

*Because it had so many dates!*

### Section 3: Challenge — Multi-Step Date Problems

**Solve these trickier problems involving dates and time conversions.**

**16.** School holidays start on June 20th and last exactly 2 weeks. On what date do they end?

Working: \_\_\_\_\_



Answer: \_\_\_\_\_

**17.** A sports camp runs from Monday, August 5th to Friday, August 9th. How many days is the camp?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ days

**18.** If today is March 28th and your cousin's birthday is in 10 days, what is the date of the birthday? (Note: March has 31 days.)

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**19.** A project is due in 3 weeks and 2 days. If today is Monday, April 1st, what is the due date?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**20.** You start watching a movie at 7:15 pm. The movie is 2 hours and 25 minutes long. What time does it finish?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_

**21.** A train journey takes 3 hours and 45 minutes. If it arrives at 2:30 pm, what time did it depart?

Working: \_\_\_\_\_



Answer: \_\_\_\_\_

**22.** Your school term is 10 weeks long. How many days is this? (Remember: 1 week = 7 days, but school weeks are only 5 days.)

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ school days

**23.** If February has 29 days this year (leap year) and today is February 15th, how many days until the end of the month?

Working: \_\_\_\_\_

Answer: \_\_\_\_\_ days

### Reward Box



### Calendar Clever!

*Why was the math book always worried?  
Because it had too many problems to add up before time ran out!*

**End of Worksheet 40 — Excellent Work!**



# Year 4 Mathematics

## Worksheet 40: Answer Key

### Calendars & Time Conversions

#### Section 1: Fluency — Converting Units of Time

##### Worked solutions

1. Answer: **135 minutes**

Working:  $2 \text{ hours} = 2 \times 60 = 120 \text{ minutes}$ ;  $120 + 15 = 135 \text{ minutes}$

2. Answer: **3 minutes**

Working:  $180 \text{ seconds} \div 60 = 3 \text{ minutes}$  (since 1 minute = 60 seconds)

3. Answer: **300 seconds**

Working:  $5 \text{ minutes} \times 60 = 300 \text{ seconds}$  (since 1 minute = 60 seconds)

4. Answer: **3 weeks**

Working:  $21 \text{ days} \div 7 = 3 \text{ weeks}$  (since 1 week = 7 days)

5. Answer: **28 days**

Working:  $4 \text{ weeks} \times 7 = 28 \text{ days}$  (since 1 week = 7 days)

6. Answer: **2 hours and 30 minutes**

Working:  $150 \div 60 = 2 \text{ remainder } 30$ , so 2 hours and 30 minutes

7. Answer: **72 hours**

Working:  $3 \text{ days} \times 24 = 72 \text{ hours}$  (since 1 day = 24 hours)

8. Answer: **1 minute and 30 seconds**

Working:  $90 \div 60 = 1 \text{ remainder } 30$ , so 1 minute and 30 seconds



## Section 2: Visual Modeling — Reading a Calendar

### Answers with reasoning

9. Answer: **October 12th** (or just 12th)

*Explanation: Looking at the calendar, the next Tuesday after Tuesday the 5th is one week later, which is the 12th.*

10. Answer: **5 Saturdays**

*Explanation: Counting the Saturdays in the calendar: 3rd, 10th, 17th, 24th, and 31st = 5 Saturdays.*

11. Answer: **Thursday**

*Explanation: Looking at the calendar, October 15th falls on a Thursday (column 5).*

12. Answer: **Wednesday**

*Explanation: Looking at the calendar, October 20th is in the Wednesday column.*

13. Answer: **13 days**

*Working: From October 5th to October 19th is 14 days total, but not including these dates means  $19 - 5 - 1 = 13$  days between them. (Or count: 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th = 13 days)*

14. Answer: **14 days**

*Working: From October 8th to October 22nd is 14 days ( $22 - 8 = 14$ )*

15. Answer: **October 25th** (or 25th)

*Explanation: Looking at the Sunday column (first column), the last Sunday in October is the 25th.*

## Section 3: Challenge — Multi-Step Date Problems

### Complete worked solutions



**16. Answer: July 4th**

*Working: 2 weeks = 14 days. June 20 + 14 days: June has 30 days, so from June 20 to June 30 is 10 days, leaving 4 more days into July. Therefore, July 4th.*

**17. Answer: 5 days**

*Working: Monday (5th), Tuesday (6th), Wednesday (7th), Thursday (8th), Friday (9th) = 5 days. Or:  $9 - 5 + 1 = 5$  days (when including both start and end dates).*

**18. Answer: April 7th**

*Working: March 28 + 10 days: From March 28 to March 31 is 3 days, leaving 7 more days into April. Therefore, April 7th.*

**19. Answer: Wednesday, April 24th**

*Working: 3 weeks = 21 days;  $21 + 2 = 23$  days total. Monday, April 1 + 23 days = April 24th. Since we start on Monday and add 23 days (3 weeks and 2 days), we land on Wednesday, April 24th.*

**20. Answer: 9:40 pm**

*Working:  $7:15 \text{ pm} + 2 \text{ hours} = 9:15 \text{ pm}$ ;  $9:15 \text{ pm} + 25 \text{ minutes} = 9:40 \text{ pm}$*

**21. Answer: 10:45 am**

*Working: Work backwards from 2:30 pm.  $2:30 \text{ pm} - 3 \text{ hours} = 11:30 \text{ am}$ ;  $11:30 \text{ am} - 45 \text{ minutes} = 10:45 \text{ am}$*

**22. Answer: 50 school days**

*Working:  $10 \text{ weeks} \times 5 \text{ school days per week} = 50 \text{ school days}$ . (Note: Regular weeks have 7 days, but school weeks typically have 5 days, excluding weekends.)*

**23. Answer: 14 days**

*Working: February has 29 days this year. From February 15th to the end (29th) is  $29 - 15 = 14$  days remaining.*



## Outstanding Achievement!

*You have successfully mastered reading calendars, converting units of time, and solving multi-step date problems. These skills will help you manage your time and plan activities throughout the year!*

