

A UNITS OF TIME

A.1 CHOOSING THE RIGHT UNITS OF TIME

MCQ 1: Which unit would you use to measure the time it takes to run 100 meters?

Check one answer:

- ☒ Seconds
- ☐ Minutes
- ☐ Hours
- ☐ Days
- ☐ Weeks
- ☐ Months
- ☐ Years

Answer:

- Running 100 meters is a very quick event.
- We need a small unit of time to measure it.
- The best unit is **seconds**. Yay!
- Answer: **seconds**.

MCQ 2: Which unit would you use to measure the time it takes to clean up your bedroom?

Check one answer:

- ☐ Seconds
- ☒ Minutes
- ☐ Hours
- ☐ Days
- ☐ Weeks
- ☐ Months
- ☐ Years

Answer:

- Cleaning up a bedroom takes a short time, like 10 to 30 minutes.
- We need a unit that's not too small or too big to measure it.
- The best unit is **minutes**. Yay!
- Answer: **minutes**.

MCQ 3: Which unit would you use to measure your age?

Check one answer:

- ☐ Seconds
- ☐ Minutes

- ☐ Hours
- ☐ Days
- ☐ Weeks
- ☐ Months
- ☒ Years

Answer:

- Your age is how many years you've lived, like 8 or 9 years.
- We need a unit that measures a long time for people.
- The best unit is **years**. Yay!
- Answer: **years**.

MCQ 4: Which unit would you use to measure the time it takes to watch a movie?

Check one answer:

- ☐ Seconds
- ☐ Minutes
- ☒ Hours
- ☐ Days

Answer:

- Watching a movie takes a medium amount of time, like 1 to 2 hours.
- We need a unit that's not too small or too big to measure it.
- The best unit is **hours**. Yay!
- Answer: **hours**.

MCQ 5: Which unit would you use to measure the time it takes to go on a family camping trip?

Check one answer:

- ☐ Seconds
- ☐ Minutes
- ☐ Hours
- ☒ Days

Answer:

- A family camping trip usually takes a few days, like 3 to 5 days.
- We need a unit that measures a few days, not too short or too long.
- The best unit is **days**. Yay!
- Answer: **days**.

B CONVERTING UNITS OF TIME


B.1 CONVERTING UNITS OF TIME FROM BIGGER TO SMALLER

Ex 6:  Convert 2 hours to minutes:

$$2 \text{ h} = \boxed{120} \text{ min}$$

Answer:


$$\begin{aligned} 2 \text{ h} &= 2 \times 60 \text{ min} \\ &= 120 \text{ min} \end{aligned}$$

Ex 7:  Convert 3 days to hours:

$$3 \text{ d} = \boxed{72} \text{ h}$$

Answer:


$$\begin{aligned} 3 \text{ d} &= 3 \times 24 \text{ h} \\ &= 72 \text{ h} \end{aligned}$$

Ex 8:  Convert 5 minutes to seconds:

$$5 \text{ min} = \boxed{300} \text{ s}$$

Answer:

$$\begin{aligned} 5 \text{ min} &= 5 \times 60 \text{ s} \\ &= 300 \text{ s} \end{aligned}$$

Ex 9:  Convert 2 weeks to days:

$$2 \text{ wk} = \boxed{14} \text{ d}$$

Answer:

$$\begin{aligned} 2 \text{ wk} &= 2 \times 7 \text{ d} \\ &= 14 \text{ d} \end{aligned}$$

B.2 CONVERTING UNITS OF TIME FROM SMALLER TO BIGGER

Ex 10:  Convert 120 seconds to minutes:

$$120 \text{ s} = \boxed{2} \text{ min}$$

Answer:


$$\begin{aligned} 120 \text{ s} &= 120 \div 60 \text{ min} \\ &= 2 \text{ min} \end{aligned}$$

Ex 11:  Convert 24 hours to days:

$$24 \text{ h} = \boxed{1} \text{ d}$$

Answer:

$$\begin{aligned} 24 \text{ h} &= 24 \div 24 \text{ d} \\ &= 1 \text{ d} \end{aligned}$$

Ex 12:  Convert 180 minutes to hours:

$$180 \text{ min} = \boxed{3} \text{ h}$$

Answer:

$$\begin{aligned} 180 \text{ min} &= 180 \div 60 \text{ h} \\ &= 3 \text{ h} \end{aligned}$$

Ex 13:  Convert 14 days to weeks:

$$14 \text{ d} = \boxed{2} \text{ wk}$$

Answer:

$$\begin{aligned} 14 \text{ d} &= 14 \div 7 \text{ wk} \\ &= 2 \text{ wk} \end{aligned}$$

B.3 DIVIDING TIME

Ex 14: If you divide an hour into two equal periods, how many minutes is one half hour?

$$\text{One half hour} = \boxed{30} \text{ minutes}$$

Answer:

- An hour has 60 minutes.
- We divide it into two equal periods.
- Splitting 60 by 2 gives: $60 \div 2 = 30$.
- One half hour is 30 minutes.

Ex 15: If you divide an hour into four equal periods, how many minutes is one quarter hour?

$$\text{One quarter hour} = \boxed{15} \text{ minutes}$$

Answer:

- An hour has 60 minutes.
- We divide it into four equal periods.
- Splitting 60 by 4 gives: $60 \div 4 = 15$.
- One quarter hour is 15 minutes.

Ex 16: If you divide a day into two equal periods, how many hours is half of a day?

$$\text{Half of a day} = \boxed{12} \text{ hours}$$

Answer:

- A day has 24 hours.
- We divide it into two equal periods.
- Splitting 24 by 2 gives: $24 \div 2 = 12$.
- Half of a day is 12 hours.

C 24-HOUR TIME FORMAT

C.1 TELLING TIME THE 24-HOUR WAY

Ex 17: Your favorite show starts at 6:15 PM. What time is it in 24-hour time?

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Answer:

- Look at PM. Add 12 to the hours: $6 + 12 = 18$.
- Keep the minutes: 15 minutes.
- Write the time: **18:15**.

Ex 18: You wake up at 7:45 AM for school. What time is it in 24-hour time?

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Answer:

- Look at AM. The hours stay the same: 7 hours.
- Keep the minutes: 45 minutes.
- Write the time: **07:45**.

Ex 19: Your soccer game starts at 4:30 PM. What time is it in 24-hour time?

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Answer:

- Look at PM. Add 12 to the hours: $4 + 12 = 16$.
- Keep the minutes: 30 minutes.
- Write the time: **16:30**.

Ex 20: You eat dinner at 7:00 PM. What time is it in 24-hour time?

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Answer:

- Look at PM. Add 12 to the hours: $7 + 12 = 19$.
- Keep the minutes: 0 minutes.
- Write the time: **19:00**.

C.2 FINDING EVERYDAY TIME FROM 24-HOUR CLOCKS

Ex 21: You have breakfast at 07:30. What time is it?

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Answer:

- Look at 07:30. It's less than 12:00, so the hours stay 7.
- Keep the minutes: 30 minutes.
- Times before noon are AM.
- Write the time: **7:30 AM**.

Ex 22: Your art class starts at 14:45. What time is it?

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Answer:

- Look at 14:45. It's more than 12:00, so subtract 12 from the hours: $14 - 12 = 2$.
- Keep the minutes: 45 minutes.
- Times after 12:00 are PM.
- Write the time: **2:45 PM**.

Ex 23: You go to bed at 20:00. What time is it?

:

Answer:

- Look at 20:00. It's more than 12:00, so subtract 12 from the hours: $20 - 12 = 8$.
- Keep the minutes: 0 minutes.
- Times after 12:00 are PM.
- Write the time: **8:00 PM**.

Ex 24: Your music lesson starts at 15:20. What time is it?

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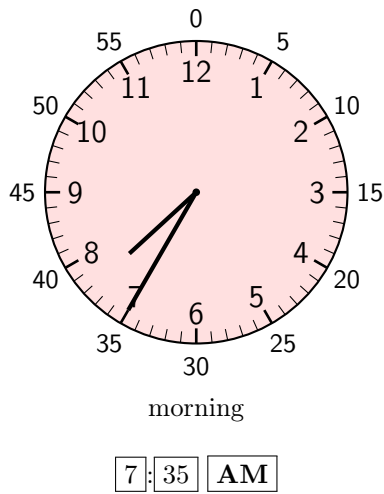
Answer:

- Look at 15:20. It's more than 12:00, so subtract 12 from the hours: $15 - 12 = 3$.
- Keep the minutes: 20 minutes.
- Times after 12:00 are PM.
- Write the time: **3:20 PM**.

D READING CLOCK

D.1 READING CLOCK

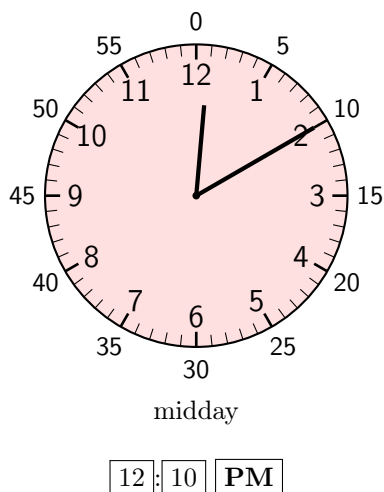
Ex 25: You leave for school at the time shown on this clock. What time is it?



Answer:

- The little hand is past the 7 but not yet at the 8, so the hour is 7.
- The big hand points to 7. Count by 5s: 5, 10, 15, 20, 25, 30, 35 minutes.
- It's morning, so the time is **7:35 AM**.

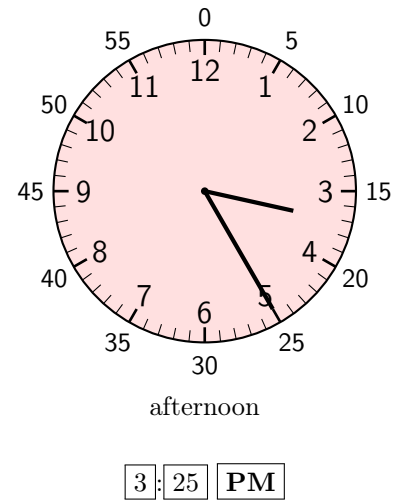
Ex 26: You eat lunch at the time shown on this clock. What time is it?



Answer:

- The little hand points to the 12, so the hour is 12.
- The big hand points to 2. Count by 5s: 5, 10 minutes.
- It's midday, just after noon, so the time is **12:10 PM**.

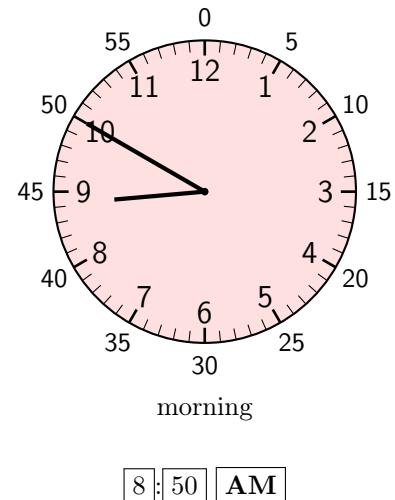
Ex 27: Your playtime starts at the time shown on this clock. What time is it?



Answer:

- The little hand points to the 3, so the hour is 3.
- The big hand points to 5. Count by 5s: 5, 10, 15, 20, 25 minutes.
- It's afternoon, so the time is **3:25 PM**.

Ex 28: You read a book at the time shown on this clock. What time is it?

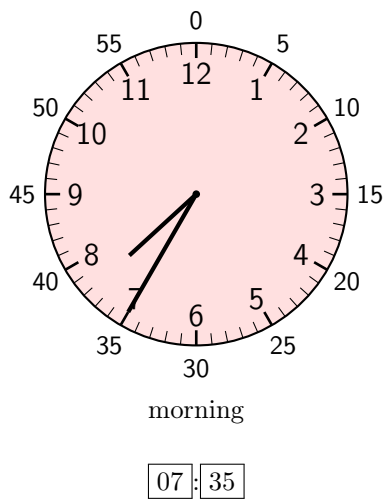


Answer:

- The little hand is past the 8 but not yet at the 9, so the hour is 8.
- The big hand points to 10. Count by 5s: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 minutes.
- It's morning, so the time is **8:50 AM**.

D.2 READING CLOCK FOR 24-HOUR TIME

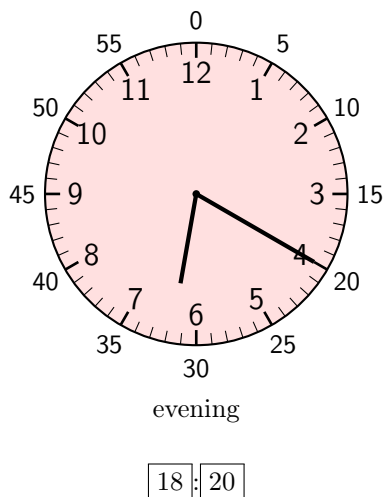
Ex 29: You leave for school at the time shown on this clock. What time is it in 24-hour format?



Answer:

- The little hand is past the 7 but not yet at the 8, so the hour is 7.
- The big hand points to 7. Count by 5s: 5, 10, 15, 20, 25, 30, 35 minutes.
- It's morning, so the hours stay the same. Add a zero before 7 for 24-hour time.
- Write the time: **07:35**.

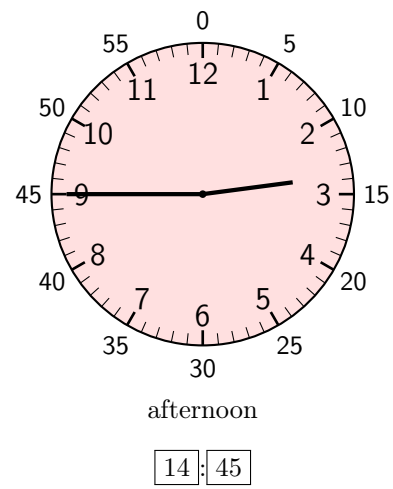
Ex 30: You eat dinner at the time shown on this clock. What time is it in 24-hour format?



Answer:

- The little hand points to the 6, so the hour is 6.
- The big hand points to 4. Count by 5s: 5, 10, 15, 20 minutes.
- It's evening, so add 12 to the hours: $6 + 12 = 18$.
- Write the time: **18:20**.

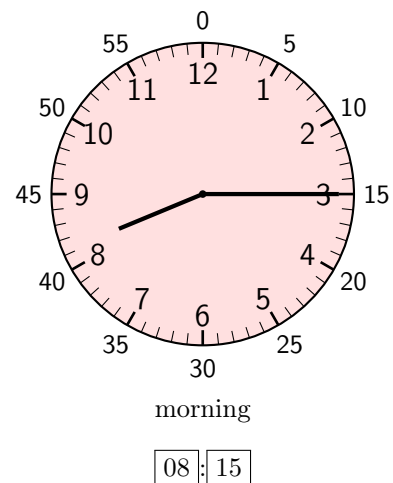
Ex 31: Your art class starts at the time shown on this clock. What time is it in 24-hour format?



Answer:

- The little hand points to the 2, so the hour is 2.
- The big hand points to 9. Count by 5s: 5, 10, 15, 20, 25, 30, 35, 40, 45 minutes.
- It's afternoon, so add 12 to the hours: $2 + 12 = 14$.
- Write the time: **14:45**.

Ex 32: You have breakfast at the time shown on this clock. What time is it in 24-hour format?



Answer:

- The little hand points to the 8, so the hour is 8.
- The big hand points to 3. Count by 5s: 5, 10, 15 minutes.
- It's morning, so the hours stay the same. Add a zero before 8 for 24-hour time.
- Write the time: **08:15**.