

Time in Seconds

Introduction

- Time can be measured in hours, minutes, and seconds.
- 1 minute = 60 seconds
- 1 hour = 60 minutes = $60 \times 60 = 3600$ seconds.
- Seconds are used to measure very short time durations.
- A stopwatch is often used to measure time in seconds.
- Athletes, races, and cooking timers often use seconds to be more accurate.



Examples with Solutions

Example: How many seconds are there in 5 minutes?

- ✓ 1 minute = 60 seconds
- ✓ $5 \times 60 = 300$ seconds

Answer: 300 seconds

Example: Convert 3 hours into seconds

- ✓ 1 hour = 3600 seconds
- ✓ $3 \times 3600 = 10800$ seconds

Answer: 10800 seconds

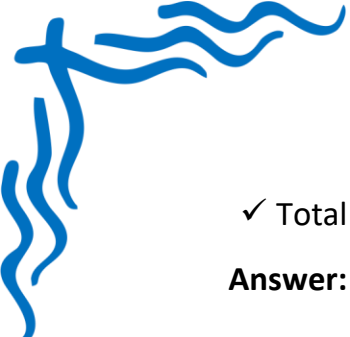
Example: A boy took 2 minutes and 30 seconds to run a race. How many seconds is that in total?

- ✓ 2 minutes = $2 \times 60 = 120$ seconds
- ✓ $120 + 30 = 150$ seconds

Answer: 150 seconds

Example: Convert $4\frac{1}{2}$ minutes to seconds

- ✓ 4 minutes = $4 \times 60 = 240$ seconds
- ✓ $\frac{1}{2}$ minute = $\frac{60}{2} = 30$ seconds



✓ Total = $240 + 30 = 270$ seconds

Answer: 270 seconds

Example: If $\frac{1}{4}$ minute passes, how many seconds have passed?

✓ 1 minute = 60 seconds

✓ $\frac{1}{4}$ of 60 = $\frac{60}{4} = 15$ seconds

Answer: 15 seconds

Summary Points

- 1 minute = 60 seconds
- 1 hour = 3600 seconds
- Use multiplication to convert minutes and hours to seconds.
- Time in seconds is useful for short durations.
- A stopwatch or timer helps measure time in seconds accurately.