# Convert from one unit of time to another
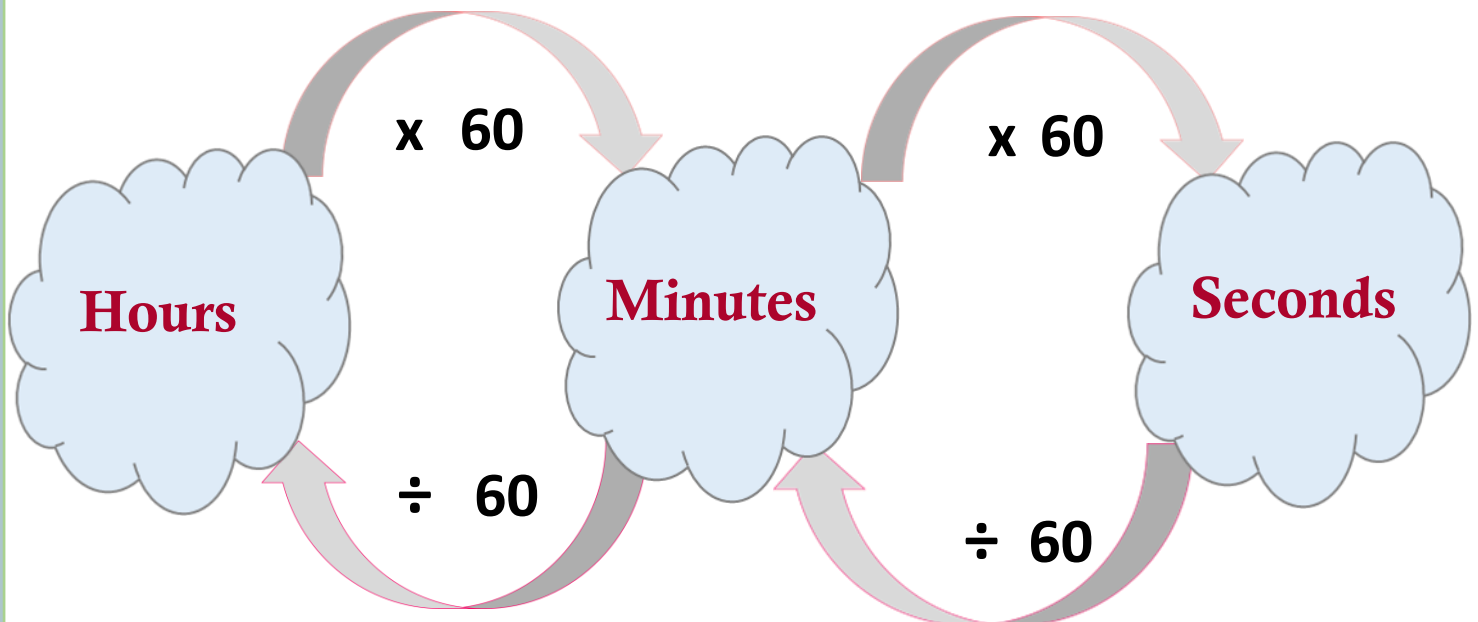
# Convert from one unit of time to another

## Conversions :

- 1  Hour   = 60 Minutes
- 1  Minute = 1/60 Hour
-  1 Minute = 60 Seconds
-  1 Second = 1/60 Minutes

**x  60**

**x  60**

**Hours**

**Minutes**

**Seconds**

**÷  60**

**÷  60**

# Convert hours into minutes

To convert hours to minutes, we have to **multiply with 60**.

$$1 \text{ hour } = 60 \text{ minutes}$$

$$2 \text{ hours } = 2 \times 60 = 120 \text{ minutes}$$

$$3 \text{ hours } = 3 \times 60 = 180 \text{ minutes}$$

**Example: 1**   Convert 5 hours into minutes.

**Solution:**

$$1 \text{ hour } = 60 \text{ minutes}$$

$$5 \text{ hours } = 5 \times 60 \text{ minutes}$$

$$= 300 \text{ minutes}$$

$$5 \text{ hours } = 300 \text{ minutes}$$

**Example: 2**   Convert 8 hours into minutes.

**Solution:**

$$1 \text{ hour } = 60 \text{ minutes}$$

$$8 \text{ hours } = 8 \times 60 \text{ minutes}$$

$$= 480 \text{ minutes}$$

$$8 \text{ hours } = 480 \text{ minutes}$$

## Convert hours & minutes into minutes

**Example: 3**

**Convert 6 hours and 25 minutes into minutes.**

**Solution:**

**Step 1:**

Convert the hours into minutes.

$$6 \text{ hours} = 6 \times 60 \text{ minutes}$$
$$= 360 \text{ minutes}$$
$$6 \text{ hours} = 360 \text{ minutes}$$

**Step 2:**

Add the converted minutes with the given minutes

$$6 \text{ hours and } 25 \text{ minutes} = 360 + 25$$
$$= 385 \text{ minutes}$$

**6 hours and 25 minutes = 385 minutes**

# Convert minutes into seconds

To convert minutes into seconds, we have to **multiply with 60**.

$$1 \text{ minute} = 60 \text{ seconds}$$

$$2 \text{ minutes} = 2 \times 60$$

$$= 120 \text{ seconds}$$

**Example: 1**    Convert 3 minutes into seconds.

**Solution:**

$$1 \text{ minute} = 60 \text{ seconds}$$

$$3 \text{ minutes} = 3 \times 60 \text{ seconds}$$

$$= 180 \text{ seconds}$$

$$3 \text{ minutes} = 180 \text{ seconds}$$

**Example: 2**    Convert 9 minutes into seconds.

**Solution:**

$$1 \text{ minute} = 60 \text{ seconds}$$

$$9 \text{ minutes} = 9 \times 60 \text{ seconds}$$

$$= 540 \text{ seconds}$$

$$9 \text{ minutes} = 540 \text{ seconds}$$

# Convert minutes & seconds into seconds

**Example: 3**

**Convert 45 minutes and 35 seconds into seconds.**

**Solution:**

**Step 1:**

Convert the minutes into seconds.

45 minutes $=$ 45 X 60 seconds

$=$ 2700 seconds

45 minutes $=$ 2700 seconds

**Step 2:**

Add the converted seconds with the given seconds

45 minutes and 35 seconds $=$ 2700 + 35

$=$ 2735 seconds

**45 minutes and 35 seconds = 2735 seconds**

# Convert minutes into hours

**To convert minutes to hours, we have to divide by 60.**

| 1 minute | = | 1÷60 hours | | |
|---|---|---|---|---|
| 60 minutes | = | 60 ÷ 60 | = | 1 hour |
| 180 minutes | = | 180 ÷ 60 | = | 3 hours |

**Example: 1   Convert 240 minutes into hours.**

**Solution:**

| 1 minute | = | 1 ÷ 60 hours |
|---|---|---|
| 240 minutes | = | 240 ÷ 60 hours |
| | = | 4 hours |
| 240 minutes | = | 4 hours |

**Example: 2   Convert 420 minutes into hours.**

**Solution:**

| 1 minute | = | 1÷60 seconds |
|---|---|---|
| 420 minutes | = | 420 ÷ 60 hours |
| | = | 7 hours |
| 420 minutes | = | 7 hours |

# Convert seconds into minutes

**To convert seconds into minutes , we have to divide by 60.**

| | | | |
|---|---|---|---|
| 1 second | = | 1÷60 minutes | |
| 60 seconds | = | 60 ÷ 60 | = 1 minute |
| 180 seconds | = | 180 ÷ 60 | = 3 minutes |

**Example: 1   Convert 300 seconds into minutes.**

**Solution:**

| | | |
|---|---|---|
| 1 second | = | 1 ÷ 60 minutes |
| 300 seconds | = | 300 ÷ 60 minutes |
| | = | 5 minutes |
| 300 seconds | = | 5 minutes |

**Example: 2   Convert 600 seconds into minutes.**

**Solution:**

| | | |
|---|---|---|
| 1 second | = | 1 ÷ 60 minutes |
| 600 seconds | = | 600 ÷ 60 minutes |
| | = | 10 minutes |
| 600 seconds | = | 10 minutes |