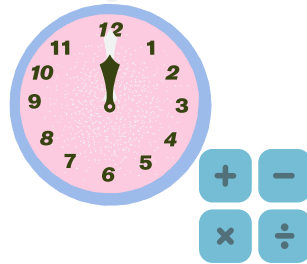
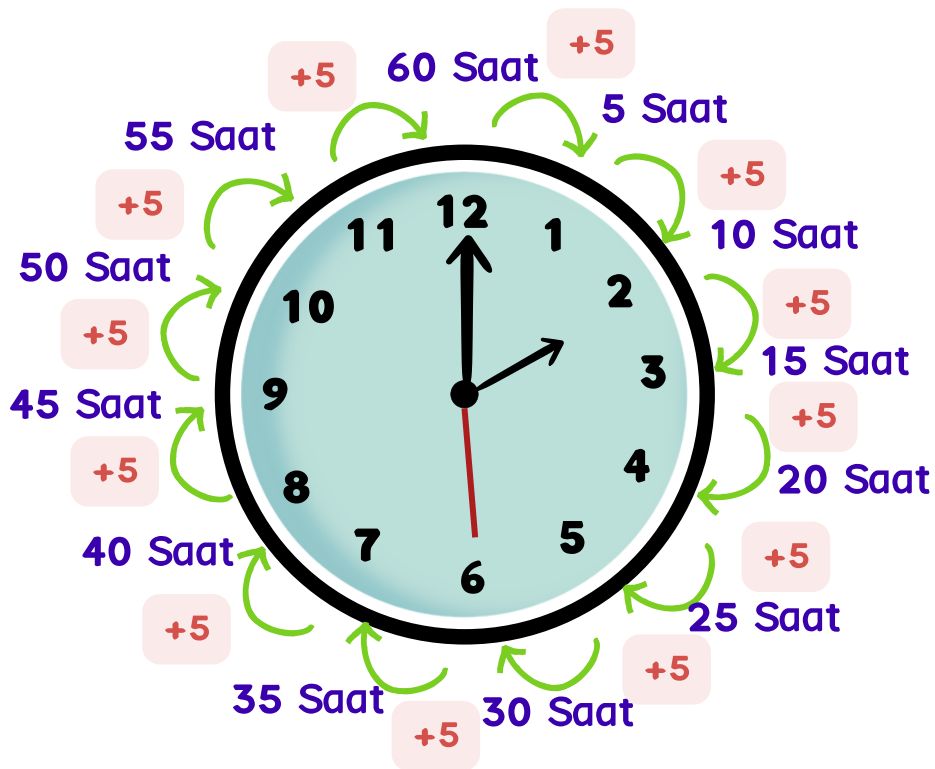


# Topik 3 – Pengiraan Waktu



## Minit & Saat



1 Pusingan Lengkap Jarum Saat (Merah) = 60 Saat

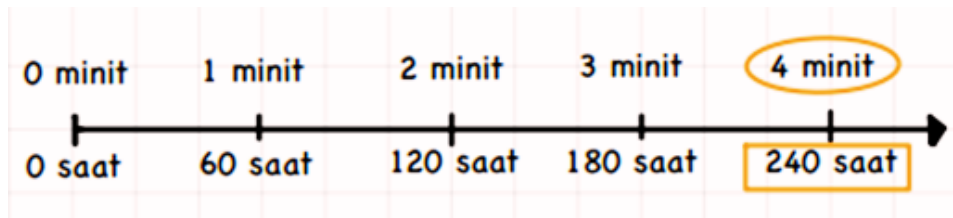
**60 Saat = 1 Minit**

## Pengiraan dalam menit dan saat

### Contoh 1

Perjalanan Aminah ke sekolah mengambil masa selama 4 minit. Nyatakan masa yang diambil oleh Aminah dalam saat.

#### Cara 1 (Lukis garis waktu)



#### Cara 2 (Operasi Darab)

$$1 \text{ minit} = 60 \text{ saat}$$

$$4 \text{ minit} = 4 \times 60 \text{ saat}$$

$$\begin{array}{r} \phantom{X} 60 \\ \times \phantom{0} 4 \\ \hline 240 \end{array}$$

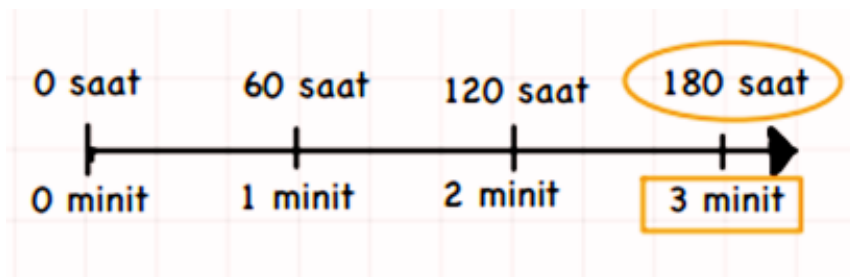
$$= 240 \text{ Saat}$$

# Pengiraan dalam menit dan saat

## Contoh 2

180 saat = \_\_\_\_ menit

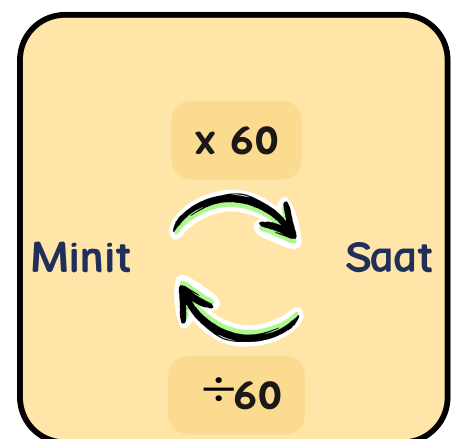
Cara 1 (Lukis garis waktu)



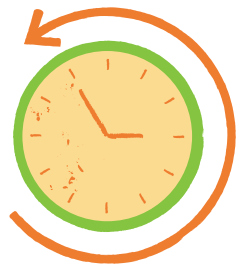
Cara 2 (Operasi Bahagi)

$$\begin{array}{r} 3 \\ 60 \overline{) 180} \\ \underline{- 180} \\ 0 \end{array}$$

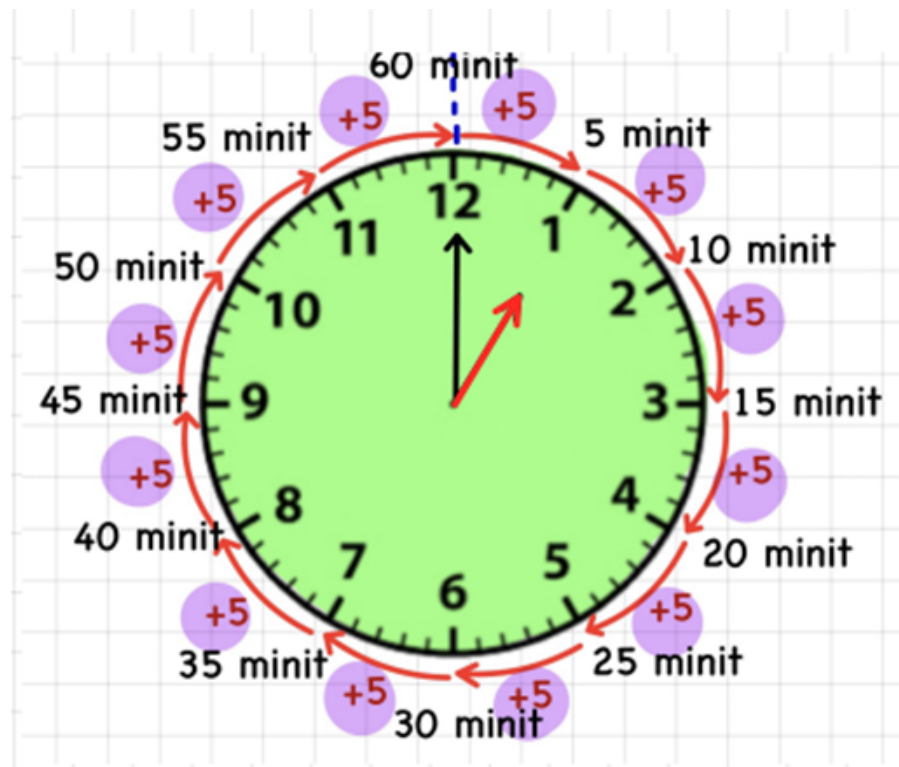
= 3 Minit



# Topik 3 – Pengiraan Waktu



## Jam & Minit



1 Pusingan Lengkap Jarum Minit = 60 Minit

**60 Minit = 1 Jam**

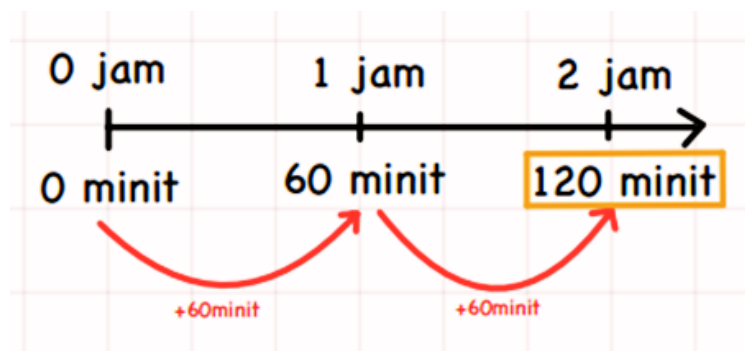
## Pengiraan dalam jam dan minit

### Contoh 1

Amalina telah mengulangkaji pelajaran selama 2 jam. Nyatakan berapa masa yang diperuntukkan oleh Amalina mengulangkaji dalam minit.

$$2 \text{ jam} = \underline{\text{120}} \text{ minit}$$

Cara 1 (Lukis garis waktu)



Cara 2 (Tambah Berulang)

$$\begin{aligned} 2 \text{ jam} &= 1 \text{ jam} + 1 \text{ jam} \\ &= 60 \text{ minit} + 60 \text{ minit} \\ &= 120 \text{ minit} \end{aligned}$$

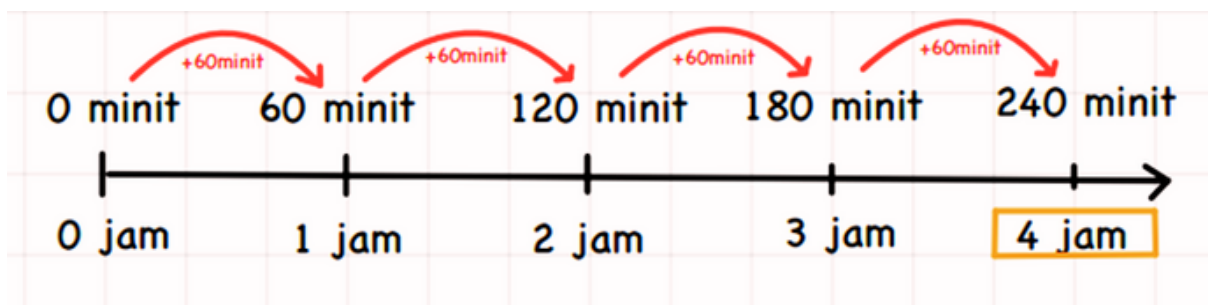
## Pengiraan dalam jam dan minit

### Contoh 2

Syazwan mengayuh basikal selama 240 minit. Nyatakan tempoh yang digunakan oleh Syazwan untuk mengayuh basikal dalam jam.

$$240 \text{ minit} = \underline{\quad 4 \quad} \text{ jam}$$

#### Cara 1 (Lukis garis waktu)



#### Cara 2 (Tolak Berulang)

240		
- 60	→ 1 jam	} 4 jam
180	- 60 → 1 jam	
120	- 60 → 1 jam	
60	- 60 → 1 jam	
0		

## Tambah Masa



### Contoh 1

$$4 \text{ jam} + 2 \text{ jam} + 1 \text{ jam} = \underline{\underline{7}} \text{ jam}$$

4	jam
2	jam
+	1 jam
<hr/>	
7	jam
<hr/>	

### Contoh 2

$$34 \text{ minit} + 15 \text{ minit} = \underline{\underline{49}} \text{ minit}$$

3	4	minit
+	1	5 minit
<hr/>		
4	9	minit
<hr/>		

### Contoh 3

$$1 \text{ jam } 20 \text{ minit} + 3 \text{ jam } 35 \text{ minit} \\ = \underline{\underline{4}} \text{ jam } \underline{\underline{55}} \text{ minit}$$

jam	minit	
1	20	
+	3	35
<hr/>		
4	55	→ 4 jam 55 minit

## Tambah & Tolak Masa



**Contoh 1**  $8 \text{ jam} + 4 \text{ jam} - 2 \text{ jam} = \underline{\underline{10}} \text{ jam}$

8 jam		12 jam
+ 4 jam		- 2 jam
<hr/>		<hr/>
12 jam		10 jam

**Contoh 2**  $55 \text{ menit} - 35 \text{ menit} + 15 \text{ menit} = \underline{\underline{35}} \text{ menit}$

55 menit		20 menit
- 35 menit		+ 15 menit
<hr/>		<hr/>
20 menit		35 menit

**Contoh 3**  $3 \text{ jam} + 2 \text{ jam } 30 \text{ menit} - 1 \text{ jam } 25 \text{ menit} = \underline{\underline{4}} \text{ jam } \underline{\underline{5}} \text{ menit}$

jam	minit		jam	minit	
3	0		5	<del>30</del> <sup>10</sup>	
+ 2	30		- 1	25	
<hr/>			<hr/>		
5	30		4	5	

→ 4 jam 5 menit



## Darab Masa



**Contoh 1**  $3 \times 15 \text{ jam} = \underline{45} \text{ jam}$

$3 \times 15 \text{ jam} = \underline{45} \text{ jam}$

**CARA 1**

$$\begin{array}{r} +1 \\ 15 \text{ jam} \\ \times 3 \\ \hline 45 \text{ jam} \end{array}$$

**CARA 2**

$$\begin{array}{r} 15 \times 3 \\ \hline 45 \end{array}$$

Diagram showing the multiplication of 15 by 3 using a grid. The grid is divided into two sections. The top section shows the multiplication of 15 by 3, resulting in 45. The bottom section shows the multiplication of 15 by 3, resulting in 45. The final result is 45 jam.

**Contoh 2**  $4 \times 47 \text{ menit} = \underline{188} \text{ menit}$

$4 \times 47 \text{ menit} = \underline{188} \text{ menit}$

**CARA 1**

$$\begin{array}{r} +2 \\ 47 \text{ menit} \\ + 4 \\ \hline 188 \text{ menit} \end{array}$$

**CARA 2**

$$\begin{array}{r} 47 \times 4 \\ \hline 188 \end{array}$$

Diagram showing the multiplication of 47 by 4 using a grid. The grid is divided into two sections. The top section shows the multiplication of 47 by 4, resulting in 188. The bottom section shows the multiplication of 47 by 4, resulting in 188. The final result is 188 menit.

**Contoh 3**  $3 \times 2 \text{ jam } 10 \text{ menit} = \underline{6} \text{ jam } \underline{30} \text{ menit}$

**CARA 1**

jam	minit
2	10
$\times 3$	
6	30

Darabkan dahulu  $10 \times 3$   
Selepas itu, darabkan  $2 \times 3$

**CARA 2**

$$\begin{array}{r} 2 \text{ jam } 10 \text{ menit} \\ \times 3 \\ \hline 6 \text{ jam } 30 \text{ menit} \end{array}$$

## Bahagi Masa



**Contoh 1**  $30 \text{ jam} \div 2 = \underline{\text{15}} \text{ jam}$

$$\begin{array}{r} \text{15 jam} \\ 2 \overline{) 30 \text{ jam}} \\ \underline{- 2} \phantom{0} \downarrow \\ 10 \\ \underline{- 10} \\ 0 \end{array}$$

**Contoh 2**  $125 \text{ minit} \div 5 = \underline{\text{25}} \text{ minit}$

$$\begin{array}{r} \text{25 minit} \\ 5 \overline{) 125 \text{ minit}} \\ \underline{- 10} \phantom{0} \downarrow \\ 25 \\ \underline{- 25} \\ 0 \end{array}$$

**Contoh 3**  $5 \text{ jam } 35 \text{ minit} \div 5 = \underline{\text{1}} \text{ jam } \underline{\text{7}} \text{ minit}$

$$\begin{array}{r} \text{1 jam 7 minit} \\ 5 \overline{) 5 \text{ jam } 35 \text{ minit}} \\ \underline{- 5 \text{ jam}} \phantom{0} \downarrow \\ 0 \phantom{0} 35 \text{ minit} \\ \underline{- 35 \text{ minit}} \\ 0 \end{array}$$