



## SKILL 6: Computing with Time

Sometimes when you add or subtract units of time, you must convert between the units.

### Example 1

**Add: 2 hours 45 minutes + 45 minutes.**

$$\begin{array}{r} 2 \text{ h } 45 \text{ min} \\ + 45 \text{ min} \\ \hline 2 \text{ h } 90 \text{ min} = 3 \text{ h } 30 \text{ min} \end{array}$$

↑  
Since 60 min = 1 h, rename 90 min as 1 h 30 min.

So, 2 hour 45 minutes + 45 minutes = 3 hours 30 minutes.

### Example 2

**Subtract: 8 hours 12 minutes – 3 hours 27 minutes.**

Subtract:	8 h 12 min	→	7 h 72 min	←	Since 1 h = 60 min, rename 8 h 12 min as 7 h 72 min.
	<u>– 3 h 27 min</u>		<u>– 3 h 27 min</u>		
			4 h 45 min	←	Subtract.

So, 8 hours 12 minutes – 3 hours 27 minutes = 4 hours 45 minutes

### Guided Practice

**Add or subtract. Rename when necessary.**

1. 12 hours → \_\_\_\_\_ hours 60 minutes

$$\begin{array}{r} \text{_____} \\ - \text{_____} \\ \hline \text{_____} \end{array} \begin{array}{r} 38 \text{ minutes} \\ \text{_____} \\ - \text{_____} \\ \hline \text{_____} \end{array}$$

\_\_\_\_\_ hours \_\_\_\_\_ minutes

2. 9 minutes 5 seconds → \_\_\_\_\_ minutes \_\_\_\_\_ seconds

$$\begin{array}{r} \text{_____} \\ - \text{_____} \\ \hline \text{_____} \end{array} \begin{array}{r} 40 \text{ seconds} \\ \text{_____} \\ - \text{_____} \\ \hline \text{_____} \end{array}$$

\_\_\_\_\_ minutes \_\_\_\_\_ seconds

3. 
$$\begin{array}{r} 2 \text{ h } 38 \text{ min} \\ + 3 \text{ h } 53 \text{ min} \\ \hline \end{array}$$

4. 
$$\begin{array}{r} 4 \text{ min } 17 \text{ sec} \\ + 2 \text{ min } 48 \text{ sec} \\ \hline \end{array}$$

5. 
$$\begin{array}{r} 6 \text{ h } 22 \text{ min} \\ - 4 \text{ h } 50 \text{ min} \\ \hline \end{array}$$

**SKILL 6: Practice**

Add or subtract. Rename when necessary.

$$\begin{array}{r} 1. \quad 4 \text{ h } 25 \text{ min} \\ + 2 \text{ h } 35 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 1 \text{ h } 40 \text{ min} \\ + 3 \text{ h } 17 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 2 \text{ h } 10 \text{ min} \\ - \quad 45 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 2 \text{ h } 55 \text{ min} \\ + 1 \text{ h } 40 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 7 \text{ h } 3 \text{ min} \\ - 2 \text{ h } 20 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 1 \text{ h } 29 \text{ min} \\ + 1 \text{ h } 59 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 4 \text{ min } 12 \text{ sec} \\ + 3 \text{ min } 38 \text{ sec} \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 8 \text{ min } 15 \text{ sec} \\ + 4 \text{ min } 51 \text{ sec} \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 42 \text{ min } 18 \text{ sec} \\ - 17 \text{ min } 12 \text{ sec} \\ \hline \end{array}$$

$$\begin{array}{r} 10. \quad 4 \text{ h } 47 \text{ min} \\ + 2 \text{ h } 36 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 11. \quad 8 \text{ h } 40 \text{ min} \\ - 3 \text{ h } 28 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 12. \quad 10 \text{ h } 19 \text{ min} \\ - 5 \text{ h } 25 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 13. \quad 15 \text{ min } 12 \text{ sec} \\ + 5 \text{ min } 53 \text{ sec} \\ \hline \end{array}$$

$$\begin{array}{r} 14. \quad 3 \text{ h } 44 \text{ min} \\ + \quad 55 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 15. \quad 12 \text{ h } 18 \text{ min} \\ - 10 \text{ h } 39 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 16. \quad 7 \text{ h } 16 \text{ min} \\ - 1 \text{ h } 19 \text{ min} \\ \hline \end{array}$$

$$\begin{array}{r} 17. \quad 35 \text{ min } 12 \text{ sec} \\ - 24 \text{ min } 53 \text{ sec} \\ \hline \end{array}$$

$$\begin{array}{r} 18. \quad 3 \text{ h } 26 \text{ min} \\ + 4 \text{ h } 43 \text{ min} \\ \hline \end{array}$$

Solve.

19. In a relay race with three runners, the times of the runners were 1 minute 12 seconds, 1 minute 36 seconds, and 1 minute 25 seconds. What was their total time for the race? \_\_\_\_\_

20. It took Anna 1 hour 15 minutes to ride to the summit from the trailhead. It took her 28 minutes to ride back to the trailhead. How much longer did it take her to ride to the summit than to return to the trailhead? \_\_\_\_\_

**TEST PREP**

21. Subtract:  $5 \text{ h } 12 \text{ min} - 4 \text{ h } 38 \text{ min}$ .

*Skill 6*

A 26 min

C 1 h 26 min

B 34 min

D 1 h 34 min

22. Add:  $3 \text{ ft } 8 \text{ in.} + 4 \text{ ft } 6 \text{ in.}$

*Skill 5*

F 7 ft 2 in.

H 8 ft 2 in.

G 7 ft 4 in.

J 8 ft 4 in.