

# **Time and Temperature**

### **Worksheet 1** Telling Time

Look at each clock. Fill in the blanks.

1.

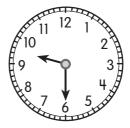


The minute hand shows

\_\_\_\_\_ minutes after

the hour.

2.



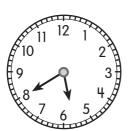
The minute hand shows

\_\_\_\_\_ minutes after

the hour.

Write the time.

3.



:

4.



:

Find the length of time.

- **5.** 2:30 P.M. is \_\_\_\_\_\_ after 2 P.M.
- **6.** 7 A.M. is \_\_\_\_\_\_\_ before 8 A.M.

Complete the table.

7. The minute hand of a clock points at the number given in the table. How many minutes have passed since the minute hand was at 12?

Number Minute Hand Points to	2	4	5	7	8	9	10	11
Minutes Passed	10							

Write the time.

**8.** The time is 15 minutes after 7.



**9.** The time is 45 minutes before 12.



#### Complete.

10:15 is \_\_\_\_\_ minutes **past** 10.

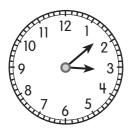
- **10.** 5:25 is \_\_\_\_\_ minutes past 5.
- **11.** 11:06 is \_\_\_\_\_ minutes past 11.
- **12.** 9:22 is \_\_\_\_\_ minutes past 9.

#### Fill in the blanks. Use past.

The time is 8:15

It is 15 minutes past 8

13.



The time is :

It is \_\_\_\_\_

14.



The time is :

It is \_\_\_\_

#### Complete.

- Example -

3:55 is \_\_\_\_\_ minutes **to** 4.

The time is three fifty-five.

$$60 - 55 = 5$$

It is 5 minutes before 4:00.

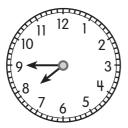
We say the time is 5 minutes to 4.



- **15.** 7:50 is \_\_\_\_\_ minutes to 8.
- **16.** 4:49 is \_\_\_\_\_ minutes to 5.
- **17.** 9:36 is \_\_\_\_\_ minutes to 10.
- **18.** 8:28 is \_\_\_\_\_ minutes to 9.

#### Fill in the blanks. Use to.

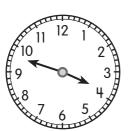
Example -



The time is 7:45

It is 15 minutes to 8

19.



The time is :

It is \_\_\_\_\_

20.



The time is :

It is \_\_\_\_\_

21.



The time is :

It is \_\_\_\_\_\_.

#### Draw the minute hand to show the time.

Example -

25 minutes past 7



22. 18 minutes past 10



23. 20 minutes to 8



24. 6 minutes to 4

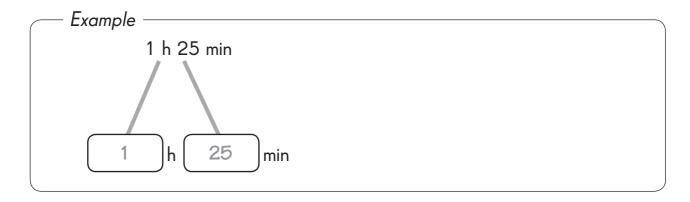


# Worksheet 2 Converting Hours and Minutes

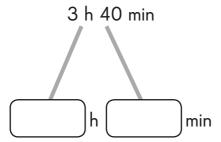
Express the time in minutes.

- **1.** 1 h = \_\_\_\_\_ min
- 2. 2 h = 2 × \_\_\_\_\_ min = \_\_\_\_ min
- 3.  $5 h = 5 \times \underline{\hspace{1cm}} min$
- **4.**  $7 h = 7 \times \underline{\hspace{1cm}} min$

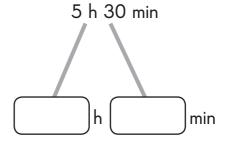
#### Complete each number bond.



**5.** 



6.



#### Express the time in minutes.

2 h 30 min = 120 min + 30 min = 150 min 2 h = 120 min 2 h = 120 min 30 min

- 7.  $3 \text{ h } 25 \text{ min} = \underline{\qquad} \text{min} + 25 \text{ min}$   $= \underline{\qquad} \text{min}$
- **8.** 5 h 35 min =  $\_$  min + 35 min =  $\_$  min
- **9.** 4 h 8 min = \_\_\_\_\_ min + \_\_\_\_ min = \_\_\_\_ min
- **10.** 7 h 12 min = \_\_\_\_\_ min + \_\_\_\_ min = \_\_\_\_ min

Name: \_\_\_\_\_

Date:

#### **Express the time in hours.**

Example ----

$$=$$
  $\frac{2}{}$  h

11.

180 min 
$$=$$
  $\times$  60 min

12.

$$300 \, \text{min} = \underline{\qquad} \times 60 \, \text{min}$$

#### Fill in the blanks.

Example -

80 minutes is between \_\_\_\_\_1 hour and \_\_\_\_\_2 hours.

$$1 h = 60 min$$

$$2 h = 120 min$$



- 13. 99 minutes is between \_\_\_\_\_ hour and \_\_\_\_ hours.
- 14. 165 minutes is between \_\_\_\_\_ hours and \_\_\_\_\_ hours.

#### Express the time in hours and minutes.

- 18. 200 min = \_\_\_\_\_ h \_\_\_\_ min \_\_\_\_ min

### **Worksheet 3** Adding Hours and Minutes

Add the minutes.

- 1.  $5 \min + 35 \min = \underline{\qquad} \min$
- **2.**  $25 \min + 25 \min = \underline{\qquad} \min$

#### Add the minutes.

Then convert the minutes to hours and minutes.

- 3. 50 min + 45 min = \_\_\_\_\_ min = \_\_\_\_ min
- 4. 40 min + 65 min = \_\_\_\_\_ min = \_\_\_\_ min

#### Add. Use number bonds to help you.

Example -

$$2 h 20 min + 3 h 10 min = ?$$
 $2 h$ 
 $2 0 min$ 
 $3 h$ 
 $10 min$ 

Add the hours: 2 h + 3 h = 5 h

Add the minutes: 20 min + 10 min = 30 min

 $2 h 20 min + 3 h 10 min = ____ 5 __ h __ 30 __ min$ 

5. 3 h 30 min + 5 h 25 min = ?



Add the hours:  $3 h + 5 h = \underline{\hspace{1cm}} h$ 

Add the minutes:  $30 \text{ min} + 25 \text{ min} = \underline{\qquad} \text{min}$ 

 $3 h 30 min + 5 h 25 min = ____ h ___ min$ 

**6.** 5 h 25 min + 4 h 5 min = ?



Add the hours: h + h = h

Add the minutes:  $\underline{\hspace{1cm}}$  min +  $\underline{\hspace{1cm}}$  min =  $\underline{\hspace{1cm}}$  min

 $5 h 25 min + 4 h 5 min = ____ h ___ min$ 

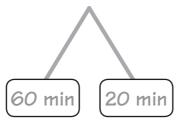
#### Add. Use number bonds to help you.

Example -

$$2 h 45 min + 35 min = ?$$

Add the minutes: 45 min + 35 min = 80 min

$$80 \quad min = 1 \quad h \quad 20 \quad min$$



Add the hours and minutes:  $2 h + \underline{1} h + \underline{20} min$ 

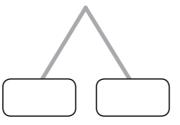
$$=$$
  $\frac{3}{\text{h}}$   $\frac{20}{\text{min}}$ 

So, 2 h 45 min + 35 min =  $\frac{3}{}$  h  $\frac{20}{}$  min

#### 7. 3 h 50 min + 55 min = ?

Add the minutes:  $50 \text{ min} + 55 \text{ min} = \underline{\hspace{1cm}} \text{min}$ 

 $\underline{\hspace{1cm}}$  min =  $\underline{\hspace{1cm}}$  h  $\underline{\hspace{1cm}}$  min



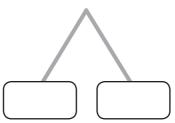
Add the hours and minutes: 3 h + \_\_\_\_\_ h + \_\_\_\_ min

So, 3 h 50 min + 55 min = \_\_\_\_\_ h \_\_\_\_ min

**8.** 2 h 35 min + 4 h 45 min = ?

Add the minutes:  $35 \min + 45 \min = \underline{\hspace{1cm}} \min$ 

 $\underline{\hspace{1cm}}$  min =  $\underline{\hspace{1cm}}$  h  $\underline{\hspace{1cm}}$  min



Add the hours:  $2 h + 4 h = _{---} h$ 

Add the hours and minutes: \_\_\_\_\_ h +\_\_\_\_ h =\_\_\_ min

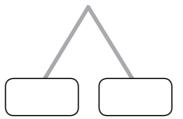
= \_\_\_\_\_ h \_\_\_\_ min

So,  $2 h 35 min + 4 h 45 min = ____ h ___ min$ 

**9.** 6 h 20 min + 7 h 50 min = ?

Add the minutes:  $\dots$  min +  $\dots$  min =  $\dots$  min

 $_{\mathrm{min}} = _{\mathrm{min}} h _{\mathrm{min}}$  min



Add the hours: h + h = h

Add the hours and minutes: h + min

= \_\_\_\_\_ h \_\_\_\_ min

So, 6 h 20 min + 7 h 50 min = \_\_\_\_\_ h \_\_\_\_ min

# Worksheet 4 Subtracting Hours and Minutes Subtract.

Example — 35 min — 20 min = \_\_\_\_\_ 15 \_\_\_ min

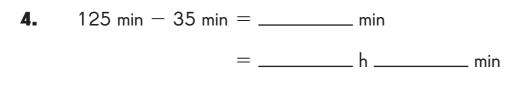
- **1.**  $55 \min 25 \min =$   $\min$
- **2.**  $60 \min 45 \min = \underline{\qquad} \min$

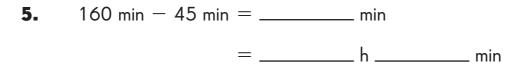
#### Subtract the minutes.

Then convert the minutes to hour and minutes.

3. 
$$150 \text{ min} - 40 \text{ min} = \underline{\qquad} \text{ min}$$
  $1 \text{ h} = 60 \text{ min}$ 

$$=$$
 \_\_\_\_\_ h \_\_\_\_ min

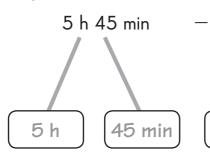




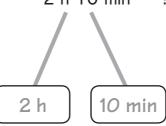


#### Subtract. Use number bonds to help you.

Example -



2 h 10 min = ?



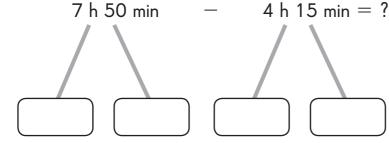
Subtract the hours: 5 h - 2 h = 3 h

Subtract the minutes: 45 min - 10 min = 35 min

Add the hours and minutes: \_\_\_\_3 \_\_ h \_\_\_35 \_\_ min

5 h 45 min - 2 h 10 min = 3 h 35 min

6.



Subtract the hours:  $7 h - 4 h = \underline{\hspace{1cm}} h$ 

Subtract the minutes:  $50 \text{ min} - 15 \text{ min} = \underline{\qquad} \text{min}$ 

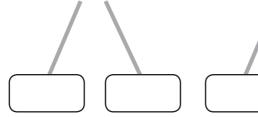
Add the hours and minutes: \_\_\_\_\_ h \_\_\_\_ min

 $7 \text{ h } 50 \text{ min} - 4 \text{ h } 15 \text{ min} = \underline{\qquad} \text{ h } \underline{\qquad} \text{ min}$ 

**7.** 



$$5 h 25 min = ?$$



Subtract the hours:  $9 h - 5 h = \underline{\hspace{1cm}} h$ 

Subtract the minutes:  $40 \text{ min} - 25 \text{ min} = \underline{\qquad} \text{min}$ 

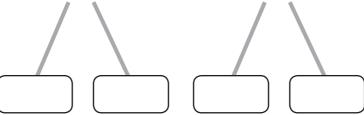
Add the hours and minutes: \_\_\_\_\_ h \_\_\_\_ min

 $9 \text{ h } 40 \text{ min } - 5 \text{ h } 25 \text{ min } = \underline{\qquad} \text{ h } \underline{\qquad} \text{ min }$ 

8.

$$5\ h\ 25\ min$$

$$4 h 5 min = ?$$



Subtract the hours: h - h = h

Subtract the minutes:  $\underline{\hspace{1cm}}$  min  $-\underline{\hspace{1cm}}$  min  $=\underline{\hspace{1cm}}$  min

Add the hours and minutes: \_\_\_\_\_ h \_\_\_\_ min

 $5 \text{ h } 25 \text{ min} - 4 \text{ h } 5 \text{ min} = \underline{\hspace{1cm}} \text{ h } \underline{\hspace{1cm}} \text{ min}$ 

#### Subtract.

Example

2 h 15 min - 35 min = ?



Regroup first. Then subtract.

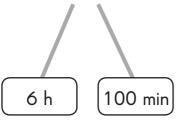
Subtract the minutes: 75 min - 35 min = 40 min

Add the hours and minutes: 1 h + <u>40</u> min

So, 2 h 15 min - 35 min =  $\frac{1}{1}$  h  $\frac{40}{1}$  min

9.

7 h 40 min - 55 min = ?



Subtract the minutes:  $100 \text{ min} - 55 \text{ min} = \underline{\hspace{1cm}}$  min

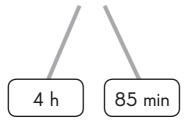
Add the hours and minutes:  $6 h + \underline{\hspace{1cm}}$  min

= \_\_\_\_\_ h \_\_\_\_ min

So, 7 h 40 min - 55 min = \_\_\_\_\_ h \_\_\_\_ min

10.

5 h 25 min - 2 h 45 min = ?



Subtract the hours:  $4 h - 2 h = \underline{\hspace{1cm}} h$ 

Subtract the minutes:  $85 \text{ min} - 45 \text{ min} = \underline{\qquad} \text{min}$ 

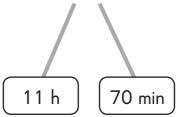
Add the hours and minutes: h + min

= \_\_\_\_\_ h \_\_\_\_ min

So, 5 h 25 min - 2 h 45 min = \_\_\_\_\_ h \_\_\_\_ min

11.

12 h 10 min - 7 h 30 min =



Subtract the hours:  $11 h - 7 h = \underline{\hspace{1cm}} h$ 

Subtract the minutes:  $70 \text{ min} - 30 \text{ min} = \underline{\hspace{1cm}} \text{min}$ 

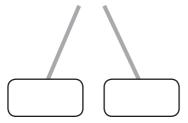
Add the hours and minutes: h + min

= \_\_\_\_\_ h \_\_\_\_ min

So,  $12 \text{ h } 10 \text{ min } - 7 \text{ h } 30 \text{ min } = \underline{\hspace{1cm}} \text{ h } \underline{\hspace{1cm}} \text{ min }$ 

12.

5 h 30 min - 2 h 50 min = ?



Subtract the hours:  $h - \underline{\hspace{1cm}} h = \underline{\hspace{1cm}} h$ 

Subtract the minutes:  $\underline{\hspace{1cm}}$  min  $\underline{\hspace{1cm}}$  min  $\underline{\hspace{1cm}}$  min

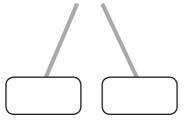
Add the hours and minutes: h + min

= \_\_\_\_\_ h \_\_\_\_ min

So, 5 h 30 min - 2 h 50 min = \_\_\_\_\_ h \_\_\_\_ min

13.

10 h 25 min - 4 h 50 min = ?



Subtract the hours: h - h = h

Subtract the minutes:  $\underline{\hspace{1cm}}$  min  $-\underline{\hspace{1cm}}$  min  $=\underline{\hspace{1cm}}$  min

Add the hours and minutes: h + min

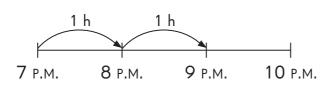
= \_\_\_\_\_ h \_\_\_\_ min

So,  $10 \text{ h } 25 \text{ min} - 4 \text{ h } 50 \text{ min} = \underline{\hspace{1cm}} \text{h} \underline{\hspace{1cm}} \text{min}$ 

### **Worksheet 5 Elapsed Time**

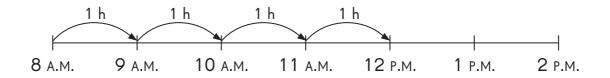
Find the elapsed time.
Use the time line to help you.

7 P.M. to 9 P.M. = 
$$\frac{2}{h}$$

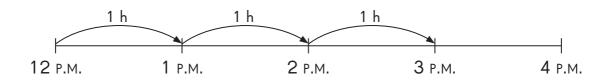


**Elapsed time** is the amount of time that has passed between the start and the end of an activity. We can use a **time line** to find elapsed time.

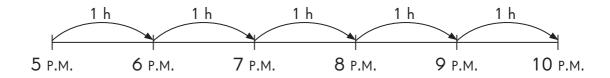
**1.** 8 A.M. to 12 noon = \_\_\_\_\_ h



**2.** 12 noon to 3 P.M. = \_\_\_\_\_ h



**3.** 5 P.M. to 10 P.M. = \_\_\_\_\_ h



**4.** 7:30 P.M. to 9:30 P.M. = \_\_\_\_\_ h

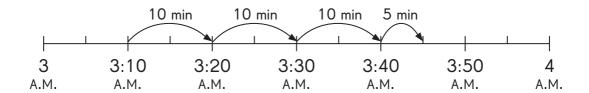


**5.** 1:45 P.M. to 4:45 P.M. = \_\_\_\_\_ h

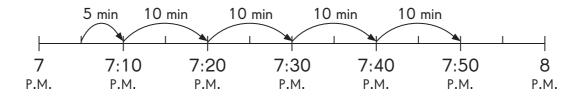


# Find the elapsed time. Use the time line to help you.

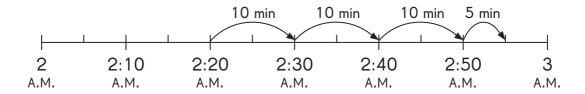
**6.** 3:10 A.M. to 3:45 A.M. = \_\_\_\_\_ min



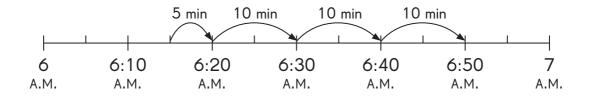
**7.**  $7:05 \text{ P.M. to } 7:50 \text{ P.M.} = \underline{\qquad} \text{ min}$ 



**8.** 2:20 A.M. to 2:55 A.M. = \_\_\_\_\_ min



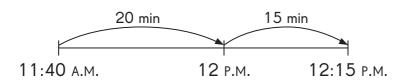
**9.** 6:15 A.M. to 6:50 A.M. = \_\_\_\_\_ min



# Find the elapsed time. Use the time line to help you.

Example -

11:40 A.M. to 12:15 P.M. = \_\_\_\_\_\_ min

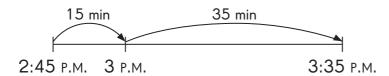


11:40 A.M. to 12:00 P.M. = 20 min

12:00 P.M. to 12:15 P.M. =  $\frac{15}{1}$  min

 $Total = \underline{20} \quad min + \underline{15} \quad min = \underline{35} \quad min$ 

**10.** 2:45 P.M. to 3:35 P.M. = \_\_\_\_\_ min

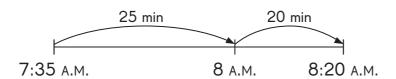


 $2:45 \text{ P.M. to } 3:00 \text{ P.M.} = \underline{\qquad} \min$ 

3:00 P.M. to 3:35 P.M. = \_\_\_\_\_ min

 $\mathsf{Total} = \underline{\qquad} \; \mathsf{min} + \underline{\qquad} \; \mathsf{min} = \underline{\qquad} \; \mathsf{min}$ 

**11.**  $7:35 \text{ A.M. to } 8:20 \text{ A.M.} = \underline{\qquad} \min$ 

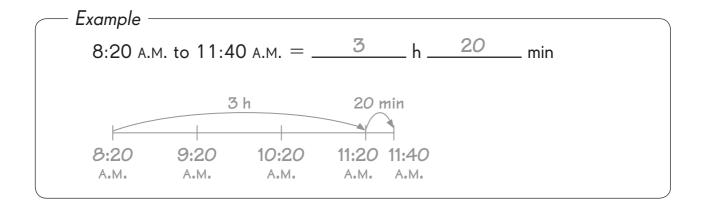


 $7:35 \text{ A.M. to } 8:00 \text{ A.M.} = \underline{\qquad} \min$ 

8:00 A.M. to 8:20 A.M. = \_\_\_\_\_ min

 $\mathsf{Total} = \underline{\qquad} \; \mathsf{min} \; + \underline{\qquad} \; \mathsf{min} \; = \underline{\qquad} \; \mathsf{min}$ 

Find the elapsed time. Draw a time line to help you.



**12.** 7:30 A.M. to 10:45 A.M. = \_\_\_\_\_\_ h \_\_\_\_ min

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**13.** 2:10 P.M. to 7:35 P.M. = \_\_\_\_\_\_ h \_\_\_\_ min

**14.** 10:45 A.M. to 2:20 P.M. = \_\_\_\_\_ h \_\_\_\_ min

#### Find the time at the end.

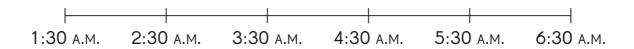
Start at 7:20 A.M. 4 hours later ?

7:20 A.M. 8:20 A.M. 9:20 A.M. 10:20 A.M. 11:20 A.M. 12:20 P.M.

Time at the end: 11:20 A.M.

**15.** Start at 1:30 A.M. 5 hours later

?



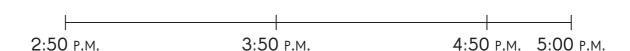
Time at the end:

16. Start at 9:25 A.M. 3 hours 15 minutes later



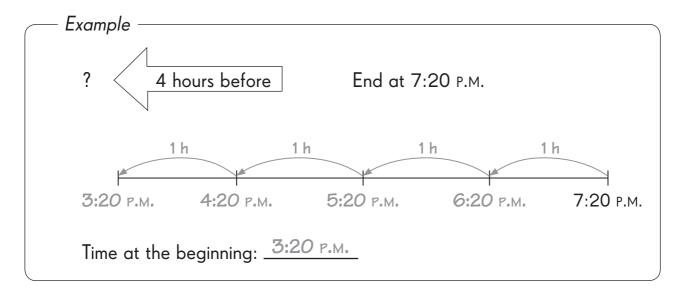
Time at the end: \_\_\_\_\_

17. Start at 2:50 P.M. 2 hours 10 minutes later ?



Time at the end:

#### Find the time at the beginning.

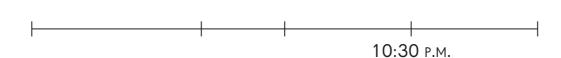


**18.** ? 2 hours before End at 1:30 A.M.



Time at the beginning: \_\_\_\_\_

19. ? I hour 40 minutes before End at 10:30 P.M.

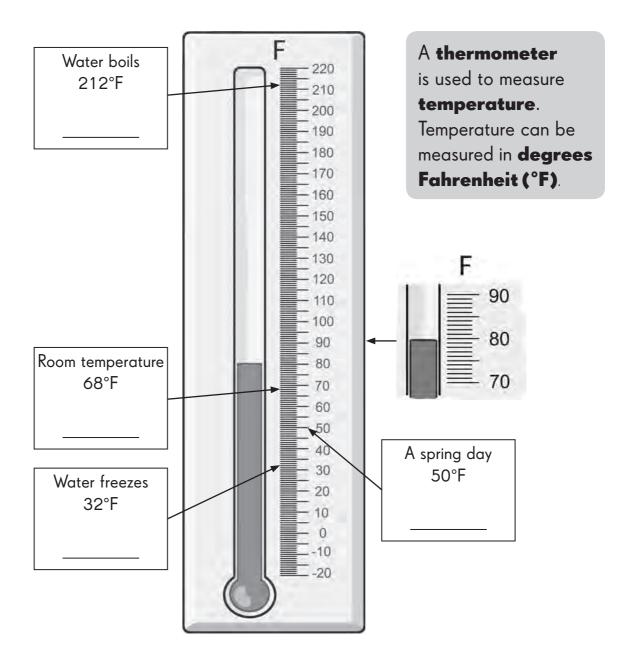


Time at the beginning: \_\_\_\_\_

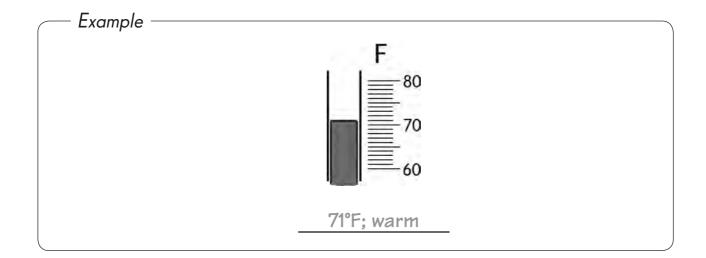
### **Worksheet 6** Measuring Temperature

Fill in the blanks with hot, warm, cool, or cold.

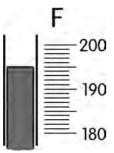
1.



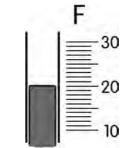
Write each temperature using °F. Then write *hot*, *warm*, *cool*, or *cold* to describe the temperature.



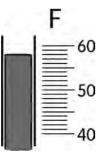
2.



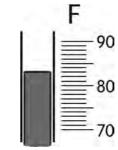
3.



4.



5.



# Worksheet 7 Real-World Problems: Time and Temperature

Solve. Draw a time line to help you.

1. Gary goes to a movie.
The movie starts at 7:30 P.M. and ends at 9:15 P.M.
How long does the movie last?

2. Sean takes 40 minutes to paint a room.

How long would it take Sean to paint 5 identical rooms?

3. Betty leaves for school at 7:15 A.M.
She takes 55 minutes to reach the school.
What time does Betty reach school?

Andrea spends 4 hours 20 minutes sewing a dress. She finishes sewing at 7:45 P.M.
What time did Andrea start sewing?

- **5.** Rachel is a city tour guide.
  - On Saturday, she spends 1 hour 15 minutes with a tour group.
  - On Sunday, she spends 1 hour 45 minutes with another tour group. Rachel is paid \$30 an hour.
  - How many hours did Rachel spend with the tour groups on both days?
  - **b.** How much did Rachel earn by giving the two tours?

- **6.** Jeron finished his school work at 4:20 P.M. according to his watch. His watch was 15 minutes fast.
  - What was the actual time Jeron finished his school work?
  - **b.** Jeron did his school work for 1 hour 30 minutes. What was the actual time he started working on his school work?

# Complete the story. Use the temperatures and words in the box.

**7.** 

hot	cold	0°F	100°F
warm	cool	212°F	40°F

Ron played at the beach on a summer day. It was a \_\_\_\_\_ day.

The temperature was \_\_\_\_\_\_ °F. To quench his thirst,

he drank a bottle of ice water. The temperature of the ice water

was \_\_\_\_\_ °F.