Name: _____ Date: _____

CHAPTER 16

Time and Temperature

Lesson 16.1 Telling Time

Tell the time. Use *past* or *to*.

Example

52 minutes past 7

32 minutes to 12

1.

_____

2.

_____

3.

_____

4.

_____

Name: _____ **Date:** _____

Tell the time in two ways.

Example

2:18

18 minutes past 2

27 minutes past 8

33 minutes to 9

10:11

49 minutes to 11

32 minutes past 5

28 minutes to 6

5.

_____

_____

6.

_____

_____

Fill in each blank with the correct time.

7. 21 minutes past 8 is _____.

8. 11 minutes to 11 is _____.

9. 7:18 is _____ minutes past _____.

10. 10:53 is _____ minutes to _____.

Name: _____ Date: _____

Lesson 16.2 Converting Hours and Minutes

Express the time in minutes.

1. 3 h = _____ min

2. 1 h 45 min = _____ min

3. 2 h 29 min = _____ min

4. 4 h 31 min = _____ min

5. 6 h 18 min = _____ min

6. 3 h 23 min = _____ min

7. 2 h 58 min = _____ min

8. 4 h 42 min = _____ min

Express the time in hours.

9. 360 min = _____ h

10. 240 min = _____ h

11. 300 min = _____ h

12. 420 min = _____ h

13. 180 min = _____ h

Express the time in hours and minutes.

14. 95 min = _____ h _____ min

15. 105 min = _____ h _____ min

Name: _____ **Date:** _____

16. 160 min = _____ h _____ min

17. 195 min = _____ h _____ min

18. 235 min = _____ h _____ min

19. 270 min = _____ h _____ min

20. 305 min = _____ h _____ min

21. 420 min = _____ h _____ min

Solve each word problem.
Show your work.

22. Sylvia plays basketball for 110 minutes.
How many hours and minutes are there in 110 minutes?

23. Jack takes 2 hours 35 minutes to complete his science project.
How many minutes are there in 2 hours 35 minutes?

Name: _____ Date: _____

Lesson 16.3 Adding Hours and Minutes

Add.

Example

1 h 25 min + 2 h 15 min

1 h 25 min 2 h 15 min

So, 1 h 25 min + 2 h 15 min
= 3 h 40 min

Step 1: 1 h + 2 h = 3 h

Step 2: 25 min + 15 min = 40 min

Step 3: 3 h + 40 min = 3 h 40 min

1. 3 h 40 min + 4 h 15 min

3 h 40 min 4 h 15 min

So, 3 h 40 min + 4 h 15 min

= ____ h ____ min

Step 1: ____ h + ____ h = ____ h

Step 2: ____ min + ____ min

= ____ min

Step 3: ____ h + ____ min

= ____ h ____ min

2. 2 h 35 min + 6 h 20 min

2 h 35 min 6 h 20 min

So, 2 h 35 min + 6 h 20 min

= ____ h ____ min

Step 1: ____ h + ____ h = ____ h

Step 2: ____ min + ____ min

= ____ min

Step 3: ____ h + ____ min

= ____ h ____ min

Name: _____ **Date:** _____

3. 4 h 5 min + 5 h 30 min

4 h 5 min 5 h 30 min

So, 4 h 5 min + 5 h 30 min

= ____ h ____ min

Step 1 ____ h + ____ h = ____ h

Step 2 ____ min + ____ min

= ____ min

Step 3 ____ h + ____ min

= ____ h ____ min

Add.

4. **a.** 3 h 18 min + 3 h 35 min = _____ h _____ min

b. 3 h 35 min + 1 h 15 min = _____ h _____ min

c. 4 h 16 min + 2 h 37 min = _____ h _____ min

d. 5 h 24 min + 3 h 39 min = _____ h _____ min

= _____ h _____ min

e. 3 h 45 min + 6 h 30 min = _____ h _____ min

= _____ h _____ min

f. 7 h 40 min + 3 h 25 min = _____ h _____ min

= _____ h _____ min

g. 3 h 29 min + 8 h 48 min = _____ h _____ min

= _____ h _____ min

h. 9 h 15 min + 1 h 50 min = _____ h _____ min

= _____ h _____ min

i. 4 h 48 min + 8 h 42 min = _____ h _____ min

= _____ h _____ min

Name: _____ Date: _____

Lesson 16.4 Subtracting Hours and Minutes

Subtract.

Example

5 h 40 min − 2 h 15 min

5 h 40 min 2 h 15 min

So, 5 h 40 min − 2 h 15 min
= 3 h 25 min

Step 1: 5 h − 2 h = 3 h

Step 2: 40 min − 15 min = 25 min

Step 3: 3 h + 25 min = 3 h 25 min

1. 4 h 25 min − 3 h 20 min

4 h 25 min 3 h 20 min

So, 4 h 25 min − 3 h 20 min

= ____ h ____ min

Step 1: ____ h − ____ h = ____ h

Step 2: ____ min − ____ min

= ____ min

Step 3: ____ h + ____ min

= ____ h ____ min

2. 8 h 45 min − 3 h 30 min

8 h 45 min 3 h 30 min

So, 8 h 45 min − 3 h 30 min

= ____ h ____ min

Step 1: ____ h − ____ h = ____ h

Step 2: ____ min − ____ min

= ____ min

Step 3: ____ h + ____ min

= ____ h ____ min

Name: _____ **Date:** _____

Subtract.

3. **a.** 10 h 50 min − 3 h 32 min = _____ h _____ min

b. 15 h 20 min − 7 h 36 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

c. 20 h 15 min − 6 h 38 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

d. 12 h 30 min − 5 h 43 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

e. 23 h 20 min − 8 h 48 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

f. 10 h 25 min − 3 h 55 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

g. 16 h 19 min − 2 h 42 min

= _____ h _____ min − _____ h _____ min

= _____ h _____ min

Name: _____ Date: _____

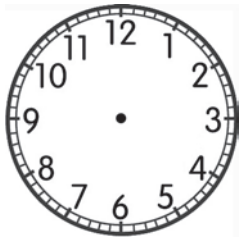
Lesson 16.5 Elapsed Time

Fill in the boxes with the correct time.
Then draw the hands on the clock.

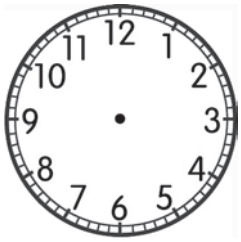
1.

7:45 P.M.

2 h 35 min later



2.



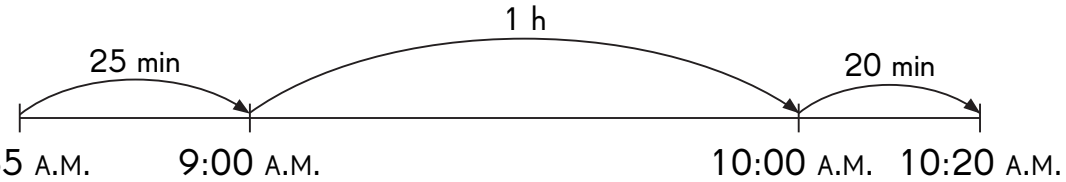
50 min before

2:15 P.M.

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

Example

8:35 A.M. to 10:20 A.M. 1h 45 min



25 min + 1 h + 20 min = 1 h 45 min

Name: _____ **Date:** _____

3. 5:40 P.M. to 8:10 P.M. _____.

4. 10:50 A.M. to 2:30 P.M. _____.

Solve. Draw a timeline to help you.

5. Mason took 2 hours 35 minutes to repair the fence in his garden.
He finishes repairing it at 4:25 P.M.
When did Mason start repairing the fence?

Name: _____ **Date:** _____

6. A supermarket opens at 7:30 A.M.
It stays open for 14 hours 30 minutes each day.
At what time does the supermarket close?

7. Class 3 students go to the Zoo for Learning Journey from 8:45 A.M. to 2:30 P.M.
How long is their learning journey?

Name: _____ **Date:** _____

8. Chantel and her family took a bus from home to the library. They left home at 9:30 A.M. and reached the library at 12 P.M. How long did the trip to the library take?

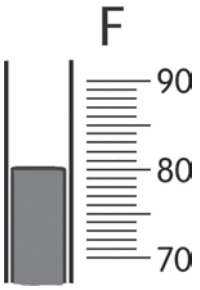
9. Tom fell asleep at 10:45 P.M. He woke up when the alarm clock went off at 6:30 A.M. How long did Tom sleep?

Name: _____ Date: _____

Lesson 16.6 Measuring Temperature

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

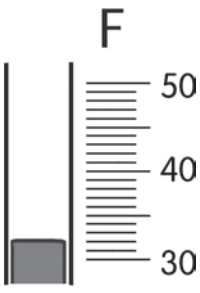
1.



_____ °F

_____

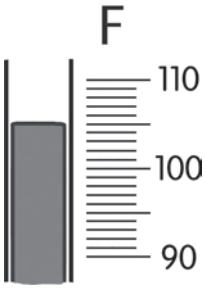
2.



_____

_____

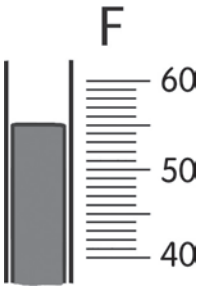
3.



_____

_____

4.

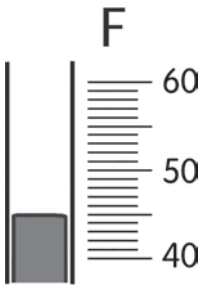


_____

_____

Name: _____ **Date:** _____

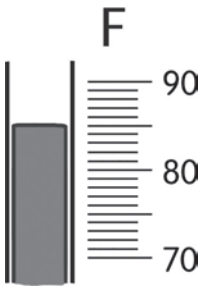
5.



_____

_____

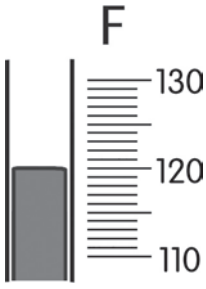
6.



_____

_____

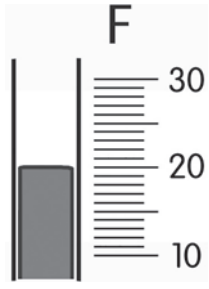
7.



_____

_____

8.



_____

_____

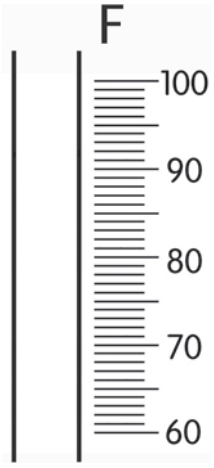
Name: _____ Date: _____

Solve.

9. Write the temperatures in order, from coldest to warmest.

96°F 69°F 76°F

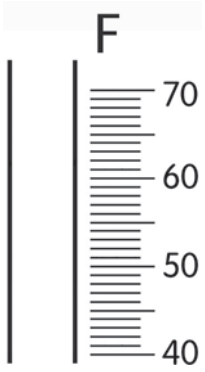
_____



10. Write the temperatures in order, from warmest to coldest.

64°F 46°F 52°F

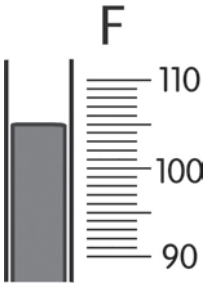
_____



Decide which activity matches the temperature.

11. Are people ice skating on a pond or swimming in a pool?

_____



Name: _____ **Date:** _____

Decide which temperature matches the activity.

12. Jimmy and his classmates are playing soccer at a field. Would the temperature be 68°F or 120°F?

_____

Complete.

13. The temperature outside is 50°F.
The temperature in a classroom is 72°F.
How much warmer is the classroom?

14. Water boils at _____°F.

15. Water freezes at _____°F.

Name: _____ Date: _____

Lesson 16.7 Real-World Problems: Time and Temperature

Solve.

1. Linda looks after her baby sister for 3 hours 25 minutes when her mother goes shopping.
How many minutes does Linda look after her baby sister?

2. Karen started making a cake for her brother at 1:30 P.M. She took the cake out of the oven at 4:10 P.M.
How long did it take Karen to make the cake?

Name: _____ **Date:** _____

3. Matthew leaves home at 11:40 A.M. and arrives at the school at 12:15 P.M. How many minutes does it take for Matthew to get to school?

4. A boat ride starts at 12:45 P.M. and returns at 2:10 P.M. How long is the boat ride?

Name: _____ **Date:** _____

5. Marian practices ballet for 1 hour 30 minutes in the morning and 45 minutes in the afternoon.
How long does Marian practice ballet in all?
Give your answer in hours and minutes.

6. Mr. Cruise travels 2 hours 40 minutes from Town P to Town Q.
He travels 1 hour 55 minutes from Town Q to Town R.
How long does he travel altogether?

Name: _____ **Date:** _____

7. Richard took 2 hours 25 minutes to bake some muffins.
Then he took 3 hours 48 minutes to bake some rolls.
How much time did Richard spend baking the muffins and the rolls?

8. Peggy takes 1 hour 25 minutes to prepare her family dinner.
Gary takes 2 hours 40 minutes to prepare his family dinner.
How much longer does it take Gary to prepare dinner than Peggy?

Name: _____ Date: _____

9. A school choir practices for 1 hour 45 minutes on Friday and 3 hours on Saturday.
How much shorter than the Friday practice is the Saturday practice?

10. Madeline is away from home for 3 hours 10 minutes to watch a show. Her sister, Rosie, is away from home for 1 hour 55 minutes to go shopping. Both of them leave home at the same time. How much earlier does Rosie return home?

Name: _____ **Date:** _____

11. The temperature at noon is 80°F.
Late evening, the temperature is 52°F.
What is the difference between the two temperatures during that day?

12. The recipe for a pizza says to preheat the oven to 450°F before putting the pizza in the oven.
The oven temperature is now 365°F. How much hotter should the oven get before you put in the pizza?

Name: _____ Date: _____

Put on Your Thinking Cap!

1. When Joanne wakes up, the clock shows 6:15 A.M.
It takes her 15 minutes to get dressed, 18 minutes to have breakfast and 25 minutes to travel to school.
School starts at 7:20 A.M. Will Joanne arrive at school on time?

2. Six planes leave the airport at equal intervals.
The first plane leaves at 8:45 A.M. and the last plane leaves at 10:15 A.M.
At what time does the third plane leave?

Name: _____ **Date:** _____

3. The doctor gives Amanda ointment for her wound.
Amanda needs to apply the ointment every 40 minutes, eight times per day.
Amanda first applies the ointment at 2:50 P.M. At what time will she apply the ointment for the last time that day?

Name: _____ Date: _____

4. Kanye's birthday is in March.

- This year, his birthday is not on a weekend.
- The date has two digits.
- You say the date when you count by twos.
- The sum of the two digits is 9.

MARCH

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

What is the date of Kanye's birthday?

Name: _____ **Date:** _____

5. Today is Monday, August 7th.
There are 31 days in August.
Marina's birthday is on September 6th.
On what day of the week is Marina's birthday?
Write the steps you followed to answer the question.