

Problem of the Day

You buy the following vegetables: $2\frac{1}{2}$ pounds of onions, $1\frac{7}{8}$ pounds of corn, and 1 pound of carrots. You bought the following fruit: $1\frac{3}{8}$ pounds of apples, $2\frac{5}{8}$ pounds of grapes, and $1\frac{1}{4}$ pounds of bananas. Do you buy more vegetables or fruit? How much more? Explain your answer.

1/5/10

Objective

TSWBAT add and subtract
measures of time and read
and use schedules



Vocabulary:

elapsed time: the time between two events



Writing Equivalent Times

How many seconds are equivalent to 1 minute and 20 seconds?

Change the minutes to seconds and add.

$$1 \text{ min} = 60 \text{ sec}$$

$$60 + 20 = 80 \text{ sec}$$

How many days are equivalent to 4 weeks and 3 days?

Change the weeks to days and add.

$$1 \text{ week} = 7 \text{ days}$$

$$7 \times 4 = 28$$

$$28 + 3 = 31 \text{ days}$$

Calculating Elapsed Time

Find the elapsed time between 1:45 pm and 5:27 pm.

Subtract 1:45 from 5:27.

$$\begin{array}{r} 5:27 \longrightarrow 5\text{h } 27\text{min} \longrightarrow 4\text{h } 87\text{min} \\ 1:45 \longrightarrow 1\text{h } 45\text{min} \longrightarrow 1\text{h } 45\text{min} \end{array}$$

* notice that 5h 27min was changed to 4h 87min so that the minutes would be a larger number.

$$\begin{array}{r} 4\text{h } 87\text{m} \\ - 1\text{h } 45\text{m} \\ \hline 3\text{h } 42\text{m} \end{array}$$

Find the elapsed time between 7:25 am and 8:12 am.

$$\begin{array}{r} 8\text{h } 12\text{m} \longrightarrow 7\text{h } 82\text{m} \\ 7\text{h } 25\text{m} \longrightarrow 7\text{h } 25\text{m} \\ \hline 47\text{m} \end{array}$$

Find the elapsed time between 8:15 am and 3:25 pm.

Notice one time is morning and the other is afternoon. Add 12 hours to the later time before you subtract.

$$\begin{array}{r} 3\text{h } 25\text{min} \\ + 12\text{h} \\ \hline 15\text{h } 25\text{m} \end{array}$$

Now subtract.

$$\begin{array}{r} 15\text{h } 25\text{m} \\ - 8\text{h } 15\text{m} \\ \hline 7\text{h } 10\text{m} \end{array}$$

Reading and Using a Schedule

Yellow Bus Line
Buses Run Every 30 minutes
Monday-Friday

Leave Wilson Street	Arrive Kagy Blvd.
7:20 am	7:45 am
7:50 am	8:15 am
....
11:20 pm	11:45 pm

Use the bus schedule above. Suppose you arrive at the Wilson Street bus stop 5 minutes after the 11:50 am bus leaves.

1. How long will you wait for the next bus?

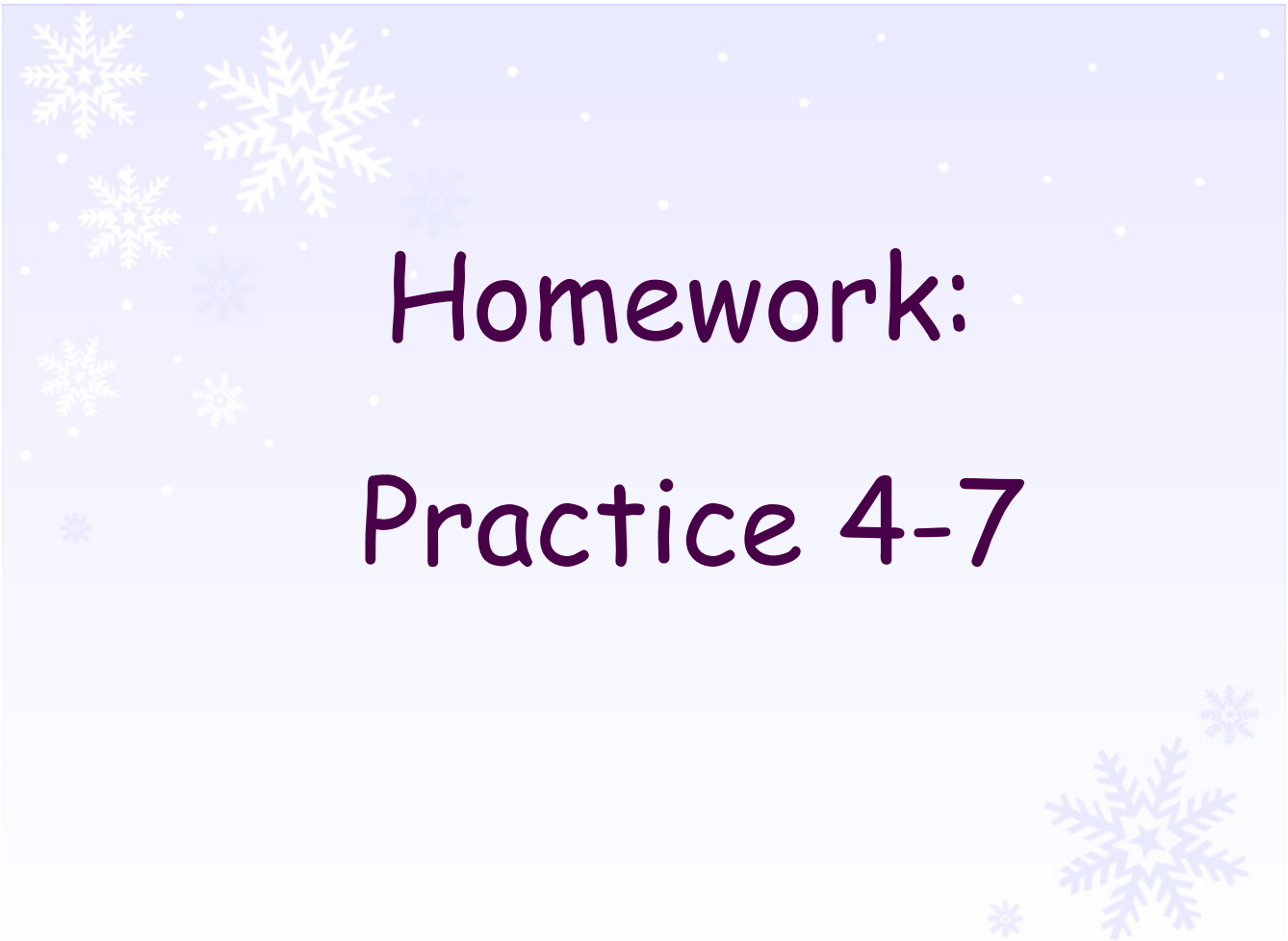
The bus runs every 30 mins. You will wait 30 - 5 min, or 25 mins.

2. How long is the bus ride?

$$\begin{array}{r} 11\text{h } 45\text{m} \\ - 11\text{h } 20\text{m} \\ \hline 25\text{m} \end{array}$$

3. When will you arrive at Kagy Blvd.?

$$11:50 + 25\text{m} = 12:15$$



Homework:
Practice 4-7