??????????????????????????????????

Calendar Moves

There are lots of interesting questions about calendars. Here is a calendar for a month.

JULY						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	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			

Here are some kinds of words that will help you answer questions.

Direction words: left, right, up, down

Calendar words: today, yesterday, tomorrow, last week, this week, next week

Arithmetic words: add, subtract

1. ↓ Arrows

Here are two examples of what a ↓ arrow means on the calendar.

			JULY			
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			

			JULY			
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			

2↓ is 9.   16↓ is 23.

a. You figure these out:

3↓ is _____.   11↓ is _____.   24↓ is _____.

b. Using a **direction word**, tell what the ↓ arrow does.

c. Using a **calendar word**, tell what the ↓ arrow does.

d. Using an **arithmetic word**, tell what the ↓ arrow does.

e. What do you think 26↓ should mean? Give a reason
for your answer.

_____

_____

_____

_____

f. What else could 26↓ mean?

_____

_____

_____

_____

2. ← Arrows

Here is an example of what a ← arrow means on the calendar.

JULY						
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			

19← is 18.

a. You figure these out:

5← is ____.   23← is ____.   30← is ____.

b. Using a **direction word**, tell what the ← arrow does.

c. Using a **calendar word**, tell what the ← arrow does.

d. Using an **arithmetic word**, tell what the ← arrow does.

e. What do you think 14← should mean? Give a reason for your answer.

_____

_____

_____

_____

f. What else could 14← mean?

_____

_____

_____

_____

3. ↑ **arrows and** → **arrows**

Can you figure out what is meant by ↑ arrows and
→ arrows?

a. You figure these out:

23↑ is _____.   27↑ is _____.

18→ is _____.   9→ is _____.

b. Tell what ↑ arrows and → arrows do by filling in this chart:

	↑ arrow	→ arrow
What the arrow means, using a **direction word**		
What the arrow means, using a **calendar word**		
What the arrow means, using an **arithmetic word**		

4. Multiple arrows

You can also do one arrow followed by another arrow.

JULY						
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			

JULY						
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			

$2\downarrow\downarrow$ is 16. $16\downarrow\rightarrow$ is 24.

a. You figure these out:

$22\uparrow\uparrow$ is _____. $4\rightarrow\rightarrow$ is _____.

b. Try these:

$21\downarrow\uparrow$ is _____. $13\uparrow\downarrow$ is _____.

Tell what happened with your answers, and explain why it happened.

_____

_____

_____

_____

_____

c. You figure these out:

$14\uparrow\rightarrow$ is _____. $6\downarrow\leftarrow$ is _____. $26\uparrow\leftarrow$ is _____.

d. Try these:

$11\downarrow\rightarrow$ is _____. $11\rightarrow\downarrow$ is _____.

Tell what happened with your answers, and explain why it happened.

_____

_____

_____

_____

_____

_____

5. Different calendars

Now let's see if arrows mean the same thing on every calendar.

a. Look back at what 23← was on the July calendar on page 4. Now look at a classroom calendar for a different month.

Does 23← turn out to be the same on your classroom calendar? If not, why not?

_____

_____

_____

_____

b. Look back at what 24↓ was on the July calendar. Does it turn out to be the same on your classroom calendar? If not, why not?

_____

_____

_____

_____

c. Make up an arrow problem whose answer on your classroom calendar is different from the answer on the July calendar.

_____

_____

_____

_____

_____