



# Math Olympiad and Problem Solving Programs

F120 - Intermediate Problem Solving

Problem Set 2.2 - Calendar

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

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

1.

2. If three days ago was Monday, then today is Thursday. An easy fact to remember is that each year, all the days shift forward by one. For instance, if Jan. 1 is a Monday this year, Jan. 1 will be a Tuesday next year, and a Wednesday the year after that, etc. So if today is Thursday, then the day 365 days from now is a

3. To do a problem like this, make a timeline that has spaces for today, tomorrow, yesterday, day after tomorrow, day before yesterday, and so on. Start with your pen on Today. Then jump back two days to Day Before Yesterday, and then jump forward 6 days and label that day Thursday. Then count how many jumps back it takes to get to Day After Tomorrow. There are two jumps, so it is two days before Thursday. So the Day After Tomorrow is .

4. 25 days has 3 weeks of 7 days plus 4 days left over. So we count back 4 days from Friday. Friday → Thursday → Wednesday →

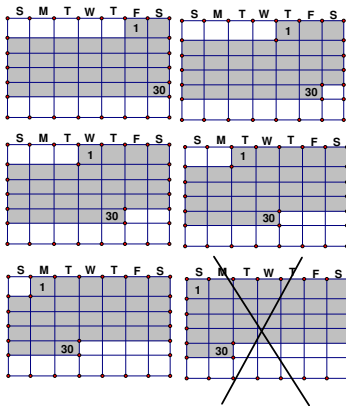
5.

6. Use the same strategy as problem 3.

7.

8. To do this problem, first draw a blank calendar on your paper. The calendar should have spaces for six weeks, seven days in each week.

Since June has 30 days, it has four complete weeks and two extra days. So we fill in our calendar with 30 days keeping it so that only four Sundays are used.



Thus the only days that can never be the 30th are . (Note: the answer key was incorrect. If you put the correct answer but got marked wrong, please see Dr. Li or the TAs for correction.)

9.

10.