

our Saxon
Bull.

AIGIE.

Rainy days.	Slight Showers.	Dry Days.
6	3	22
5	5	18
2	6	24
5	6	19
1	5	26
0	8	22
5	5	21
5	7	19
3	5	22
3	8	20
4	6	21
7	8	16
46	71	249

pter's Satellites

D. H. M.
2 3 16 Mo.
14 3 52 Mo.
15 3 40 Mo.
22 1 33 Mo.
25 3 25 Mo.

on the base, 16,
nce of the other
a triangle, to find
product of said
the longest side
the square of the

on the base, 30,
and the ratio of
sides, as 8 to 5 of
and the sides.

quired the area of
of whose sides
the included
.

The legs of a
triangle are
and the line
the right-
what is the
figure?

MOON'S PHASES.	D.	Toronto.	Quebec.	Twilight or Daylight begins & ends at—									
				Toronto.		Halifax.		Montreal.		Quebec.		Beg.	End.
				Beg.	End.	Beg.	End.	Beg.	End.	Beg.	End.		
Full Moon...	1	10 46 ev	11 18 ev	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.	A. M.	P. M.
Last Quarter	8	9 45 ev	10 17 ev	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
New Moon...	15	8 56 ev	9 28 ev	12 57	8 54	52 9	1 2 46	9 52	4 41	9 9	2 33	9 14	
First Quarter	23	6 46 ev	7 18 ev	10 2 40	9 12 2	40 9 1	2 27	9 25	2 24	9 21	2 17	9 35	
Full Moon...	31	9 31 mo	10 3 mo	20 2 22	9 30 2	44 9 3	2 6	9 46	2 1	9 51	1 54	9 59	
Apogee	22	8 8 ev	8 40 ev	30 1 8	0 48	58 9 5	1 49	10 6	2 41	10 13	1 34	10 22	

Ephemeris of the Planets, &c.

Day Mo.	Venus South Even.	Mars South Moen.	Jup. South Moen.	Satur. South Even.	Sun's Longtude.	Sun's Right Ascen.	Venus Right Ascen.	Mars Right Ascen.	Jup. Right Ascen.	Satur. Right Ascen.	Venus Decl. North.	Mars Decl. North.	Jup. Decl. South.	Satur. Decl. North.
1 ...	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
7 ...	2 12 11	38 7 29	2 10 40	44 2 33	4 49	2 15 22	4 4 53	23 52	13 12	12 41	21 15			
13 ...	2 20 11	32 7 8	1 55 46	33 2 50	5 20	2 32 22	8 4 50	21 47	14 41	12 25	21 21			
19 ...	2 27 11	26 6 48	1 35 52	20 3 26	5 51	2 43 22	10 4 55	15 17	16 5	12 11	21 26			
25 ...	2 35 11	19 6 27	1 15 58	7 3 46	6 23	3 6 22	13 5 15	15 22	17 21	11 53	21 32			
31 ...	2 42 11	13 6 5	0 54 53	53 4 7	6 54	3 24 22	15 5 15	18 35	11 48	21 37				
	2 48 11	7 5 43	0 34 69	38 4 32	7 21	3 42 22	17 5 1	14 16	19 41	11 40	21 42			

Day of Month.	Day of Week.	Day of Year.	Calendar for Upper Canada and Nova Scotia.						Calendar for Lower Canada and New Brunswick.						DEPARTMENT FOR ALL OF UPPER AND LOWER CANADA.												
			Sun Rises.			Sun Sets.			Moon Rises.			Sun Rises.			Sun Sets.			Moon Rises.			Moon's Place at 7 P. M.			Sun's Declination North.			
			h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	h	m	s	°	'	''	
1	Tuesd.	121	4	50	7	4	Rises	4	53	7	1	Rises	10	29	25	11	56	59	15.1	11	59	do.	22	15	3	19	
2	Wed.	122	4	49	7	5	7 55	4	51	7	8	3	10	25	33	11	56	51	16.1	Morn.	do.	22	15	21	21		
3	Thur.	123	4	47	7	6	9 11	4	49	7	5	9	19	21	38	11	56	44	17.1	49	do.	20	15	39	8		
4	Friday	124	4	46	7	7	10 24	4	48	7	6	10	35	10	17	42	11	56	38	18.1	1	44	do.	20	15	56	40
5	Satur.	125	4	45	7	8	11 31	4	47	7	7	11	42	10	13	47	11	56	32	19.1	2	43	do.	18	16	33	55
6	Sund.	126	4	43	7	9	Morn	4	45	7	9	Morn	10	9	51	11	56	27	20.1	3	45	do.	18	16	30	55	
7	Mond.	127	4	42	7	11	29	4	43	7	9	40	10	5	56	11	56	22	21.1	4	46	do.	16	17	47	39	
8	Tuesd.	128	4	41	7	12	1 15	4	42	7	10	1	24	10	2	0	11	56	18	22.1	5	46	do.	16	17	4	0
9	Wed.	129	4	39	7	13	1 50	4	40	7	12	1	57	9	58	5	11	56	15	23.1	6	42	do.	16	17	20	10
10	Thur.	130	4	38	7	14	2 19	4	39	7	13	2	24	9	54	9	11	56	12	24.1	7	34	do.	15	17	36	9
11	Friday	131	4	37	7	16	2 43	4	37	7	15	2	46	9	50	14	11	56	10	25.1	8	24	do.	15	17	51	44
12	Satur.	132	4	36	7	17	3 5	4	36	7	16	3	6	9	46	19	11	56	8	26.1	9	11	do.	13	18	7	2
13	Sund.	133	4	35	7	18	3 27	4	34	7	18	3	25	9	42	23	11	56	7	27.1	9	58	do.	26	18	22	1
14	Mond.	134	4	34	7	19	3 49	4	33	7	19	3	45	9	38	28	11	56	6	28.1	10	46	do.	16	18	36	42
15	Tuesd.	135	4	32	7	20	Sets.	4	32	7	20	Sets.	9	34	33	11	56	6	29.1	11	36	do.	23	18	51	4	
16	Wed.	136	4	31	7	21	8 20	4	31	7	21	8	29	9	30	37	11	56	7	6	Ev. 27	do.	19	19	5	7	
17	Thur.	137	4	30	7	22	9 29	4	30	7	22	9	39	9	26	42	11	56	8	1.6	1	20	do.	19	19	18	51
18	Friday	138	4	29	7	23	10 29	4	29	7	23	10	40	9	22	47	11	56	10	2.6	2	14	do.	19	19	32	15
19	Satur.	139	4	28	7	24	11 20	4	28	7	24	11	31	9	18	52	11	56	12	3.6	3	8	do.	14	19	45	19
20	Sund.	140	4	27	7	25	Morn	4	27	7	25	Morn	9	14	56	11	56	15	4.6	4	0	do.	26	19	58	3	
21	Mond.	141	4	26	7	26	3 4	4	26	7	26	12	9	11	1	11	56	18	5.6	4	49	do.	8	20	10	28	
22	Tuesd.	142	4	25	7	27	36	4	25	7	27	44	9	7	6	11	56	22	6.6	5	35	do.	20	20	22	23	
23	Wed.	143	4	25	7	28	1 4	4	24	7	28	1	11	9	3	10	11	56	27	7.6	6	19	do.	20	20	34	11
24	Thur.	144	4	24	7	29	1 27	4	24	7	30	1	32	8	59	15	11	56	32	8.6	7	1	do.	14	20	45	32
25	Friday	145	4	23	7	30	1 46	4	23	7	31	1	49	8	52	20	11	56	37	9.6	7	42	do.	26	20	56	31
26	Satur.	146	4	22	7	31	2 5	4	22	7	32	2	5	8	51	24	11	56	43	10.6	8	23	do.	9	20	7	8
27	Sund.	147	4	21	7	32	2 24	4	21	7	33	2	23	8	47	29	11	56	49	11.6	9	5	do.	21	21	17	24
28	Mond.	148	4	21	7	33	2 43	4	20	7	34	2	40	8	43	34	11	56	56	12.1	9	50	do.	4	21	27	17
29	Tuesd.	149	4	20	7	34	3 4	4	19	7	35	2	59	8	39	3	11	56	2	13.6	10	33	do.	17	21	36	49
30	Wed.	150	4	20	7	35	Rises	4	19	7	35	Rises	8	35	44	11	57	14	14.6	11	32	do.	1	21	45	58	
31	Thur.	151	4	19	7	36	8 7	4	18	7	36	8	7	8	31	49	11	57	19	15.6	Morn.	do.	15	21	54	44	

PROB. 14.—Required the length of each part of a board 12 feet long, and from 12 to 15 inches wide, when it is divided in two equal parts by a line drawn directly crosswise, also the length of the line.

PROB. 15.—The outside or longest curve of a

crescent is a semi-circle, and the inside curve a quadrant, required the radius of each, the area of the crescent being 100.

PROB. 16.—A body slides (without friction) down a plane inclined 30°, and acquires a velocity of 600 ft. per second. Required its length.