

as; the most
brated at the

ALGIE.

Rainy days.	Slight showers.	Dry days.
5	5	21
5	6	17
12	6	23
4	6	20
2	8	21
3	8	19
4	8	19
4	5	22
5	3	22
12	8	21
4	7	19
5	9	17

after's Satellites.

D. H. M.
10 1 41 Mo.
17 3 35 Mo.
18 11 52 Ev.
23 1 11 Mo.
25 11 58 Ev.
26 0 18 Mo.

area of a right-
angle is 108; what are
being in arith-
mension?

quired the side of
equal sides, in-
circle whose radius

area of a tri-
angle and two of the
sides and 41: required

sides of a field
and 19 rods, the
equal, what is

legs of a right-
angle are 3 to 4, and
scribed circle and
25: required the

MOON'S PHASES.	D.	Toronto.		Quebec.		Twilight or Daylight begins and ends at—											
						Toronto.		Halifax.		Montreal.		Fredricton.		Quebec.			
		h m		h m		Beg. End.		Beg. End.		Beg. End.		Beg. End.		Beg. End.		Beg. End.	
☉ Last Quar.	7	2	31 mo	3	3 mo	A. M. P. M.		A. M. P. M.		A. M. P. M.		A. M. P. M.		A. M. P. M.		A. M. P. M.	
☾ New Moon.	14	9	11 mo	9	43 mo	h m h m		h m h m		h m h m		h m h m		h m h m		h m h m	
☽ First Quar.	22	11	35 mo	0	7 mo	12 5 9 50		1 55 10 0		1 45 10 9		1 39 10 16		1 29 10 26		1 19 10 39	
☾ Full Moon.	29	5	57 ev	6	29 ev	10 1 57 10		11 46 10 12		1 36 10 17		1 28 10 30		1 19 10 39		1 10 10 39	
☽ Perigee ...	3	8	14 ev	8	40 ev	20 1 55 10		7 1 43 10 19		1 32 10 31		1 24 10 38		1 16 10 40		1 10 10 40	
☽ Apogee ...	19	1	14 ev	1	46 ev	30 2 0 10		6 1 50 10 17		1 38 10 29		1 31 10 36		1 24 10 43		1 10 10 43	

Ephemeris of the Planets, &c.

Day Mo.	Venus South Even.	Mars South Morn.	Jupiter South Morn.	Saturn South Even.	Sun's Longi- tude.	Sun's Right Ascen.	Venus Right Ascen.	Mars Right Ascen.	Jupiter Right Ascen.	Saturn Right Ascen.	Venus Decl. North.	Mars Decl. North.	Jupiter Decl. South.	Saturn Decl. Right Ascen.
	h m	h m	h m	h m	° /	h m	h m	h m	h m	h m	° /	° /	° /	° /
1 ...	2 49	11 6	5 40	0 31	70 25	4 36	7 29	3 45	22 17	5 9	24 7	19 51	11 35	21 42
7 ...	2 55	11 0	5 17	0 10	76 20	5 1	7 58	4 22	22 18	5 12	22 55	20 48	11 33	21 47
13 ...	3 0	10 54	4 55	morn	82 4	5 25	8 27	4 20	22 19	5 16	21 23	21 38	11 30	21 51
19 ...	3 4	10 49	4 32	11 30	87 48	5 50	8 54	4 38	22 20	5 19	19 33	22 21	11 28	21 55
25 ...	3 8	10 43	4 8	11 10	93 31	6 15	9 21	4 56	22 20	5 22	17 23	22 56	11 31	21 58
30 ...	3 8	10 38	3 48	10 53	98 17	6 56	9 42	5 11	22 19	5 25	15 31	23 19	11 34	22 1

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.	Pole Star in Meridian Morning.	Shadow at Noon Mark. Evening.	Mn's Age Noon.	Moon South Morn.	Moon's Place at 7 P. M.	Sun's Declination North.				
			h m	h m	h m	h m	h m	h m	h m s	h m s	days	h m s	°	'	"/			
1	Friday	152	4 18	7 37	9 18	4 18	7 36	9 30	8 27	54	11 57	28	16.6	0 31	♊	29	22	3 8
2	Satur.	153	4 18	7 37	10 21	4 18	7 38	10 33	8 23	58	11 57	37	17.6	1 34	♊	14	22	11 8
3	Sund.	154	4 17	7 38	11 13	4 17	7 39	11 22	8 20	3	11 57	46	18.6	2 37	do.	28	22	18 45
4	Mond.	155	4 17	7 39	11 52	4 17	7 39	12 0	8 16	8	11 57	56	19.6	3 29	♊	13	22	26 0
5	Tuesd.	156	4 17	7 40	Morn	4 16	7 40	Morn	8 12	13	11 58	6	20.6	4 38	do.	27	22	32 50
6	Wed.	157	4 16	7 41	24	4 16	7 40	29	8 8	18	11 58	17	21.6	5 32	♊	11	22	39 18
7	Thur.	158	4 16	7 41	49	4 16	7 41	53	8 4	22	11 58	27	22.6	6 22	do.	25	22	45 21
8	Friday	159	4 16	7 42	1 12	4 15	7 41	1 13	8 0	27	11 58	38	23.6	7 9	♊	9	22	51 1
9	Satur.	160	4 16	7 42	1 33	4 15	7 42	1 32	7 56	32	11 58	50	24.6	7 56	do.	23	22	56 16
10	Sund.	161	4 15	7 43	1 53	4 15	7 43	1 50	7 52	37	11 59	2	25.6	8 42	♊	6	23	1 7
11	Mond.	162	4 15	7 43	2 17	4 15	7 43	2 12	7 48	42	11 59	14	26.6	9 30	do.	20	23	5 35
12	Tuesd.	163	4 15	7 44	2 45	4 15	7 43	2 37	7 44	47	11 59	26	27.6	10 20	♊	2	23	9 37
13	Wed.	164	4 15	7 44	Sets	4 15	7 43	Sets	7 40	52	11 59	38	28.6	11 11	do.	15	23	13 15
14	Thur.	165	4 15	7 45	8 17	4 15	7 44	8 28	7 36	57	11 59	51	1	1 Eve. 5	do.	28	23	16 29
15	Friday	166	4 15	7 46	9 14	4 15	7 45	9 24	7 33	2	Evening	1.1	0 59	♊	10	23	19 18	
16	Satur.	167	4 15	7 46	10 14	4 15	7 45	10 11	7 29	7	12 0	16	2.1	1 52	do.	23	23	21 43
17	Sund.	168	4 15	7 46	10 35	4 15	7 46	10 44	7 25	11	12 0	29	3.1	2 42	♊	5	23	23 42
18	Mond.	169	4 15	7 47	11 4	4 15	7 47	11 12	7 21	16	12 0	42	4.1	3 30	do.	17	23	25 17
19	Tuesd.	170	4 15	7 47	11 29	4 15	7 47	11 34	7 17	21	12 0	55	5.1	4 14	do.	28	23	26 27
20	Wed.	171	4 15	7 47	11 50	4 14	7 48	11 53	7 13	26	12 1	8	6.1	4 56	♊	10	23	27 12
21	Thur.	172	4 15	7 48	Morn	4 14	7 48	Morn	7 9	31	12 1	21	7.1	5 37	do.	22	23	27 32
22	Friday	173	4 16	7 48	9 4	4 15	7 49	11	7 5	36	11 1	34	8.1	6 17	♊	4	23	27 28
23	Satur.	174	4 16	7 48	27	4 15	7 49	27	7 1	41	12 1	47	9.1	6 58	do.	17	23	26 58
24	Sund.	175	4 16	7 48	46	4 16	7 49	44	6 57	46	12 2	0	10.1	7 41	do.	29	23	26 4
25	Mond.	176	4 16	7 48	1 54	4 16	7 48	1 0	6 53	51	12 2	13	11.1	8 27	♊	12	23	24 45
26	Tuesd.	177	4 17	7 48	1 29	4 16	7 48	1 23	6 49	54	12 2	25	12.1	9 18	do.	25	23	23 2
27	Wed.	178	4 17	7 48	1 58	4 17	7 48	1 50	6 44	1	12 2	38	13.1	10 14	♊	9	23	20 53
28	Thur.	179	4 18	7 48	2 39	4 18	7 48	2 29	6 42	6	12 2	50	14.1	11 16	do.	23	23	18 20
29	Friday	180	4 18	7 48	Rises	4 18	7 48	Rises	6 38	11	12 3	2	15.1	Morn	♊	8	23	15 23
30	Satur.	181	4 19	7 48	9 44	4 18	7 48	9 14	6 34	15	12 3	14	16.1	20	do.	23	23	12 1

PROB. 17.—The lengths of three poles are 40, 43, and 45 feet. Their tops are raised and tied together, and their bottoms stand on the corners of an equilateral triangle, 32 feet on a side. What will be the height of their tops?

PROB. 18.—The height of three towers are

B

28, 30, and 34 feet, which are placed at the corners of a garden, in the form of an equilateral triangle, 50 feet on a side. Where in the garden must a pole be placed, and how long will it be, that it may just reach the top of each tower?