

2. Table.—Processes of the four rules extended to 20.

$13 + \times$	$13 \div \div$	$14 + \times$	$14 \div \div$	$15 + \times$	$15 \div \div$	$16 + \times$	$16 \div \div$	$17 + \times$	$17 \div \div$	$18 + \times$	$18 \div \div$	$19 + \times$	$19 \div \div$	$20 + \times$	$20 \div \div$
2	26	2	28	2	30	2	32	2	34	2	36	2	38	2	40
3	39	3	42	3	45	3	48	3	51	3	54	3	57	3	60
4	52	4	56	4	60	4	64	4	68	4	72	4	76	4	80
5	65	5	70	5	75	5	80	5	85	5	90	5	95	5	100
6	78	6	84	6	90	6	96	6	102	6	108	6	114	6	120
7	91	7	98	7	105	7	112	7	119	7	126	7	133	7	140
8	104	8	112	8	120	8	128	8	136	8	144	8	152	8	160
9	117	9	126	9	135	9	144	9	153	9	162	9	171	9	180
10	130	10	140	10	150	10	160	10	170	10	180	10	190	10	200
11	143	11	154	11	165	11	176	11	187	11	198	11	209	11	220
12	156	12	168	12	180	12	192	12	204	12	216	12	228	12	240
13	169	13	182	13	195	13	208	13	221	13	234	13	247	13	260
14	182	14	196	14	210	14	224	14	238	14	252	14	266	14	280
15	195	15	210	15	225	15	240	15	255	15	270	15	285	15	300
16	208	16	224	16	240	16	256	16	272	16	288	16	304	16	320
17	221	17	238	17	255	17	272	17	289	17	306	17	323	17	340
18	234	18	252	18	270	18	288	18	306	18	324	18	342	18	360
19	247	19	266	19	285	19	304	19	323	19	342	19	361	19	380
20	260	20	280	20	300	20	320	20	340	20	360	20	380	20	400

N. B.—First show your class how the columns regularly increase and decrease by ones, twos, threes, &c. The first column increases by ones, the second by twos; the third gives quotients of the second; the fourth is an increase by three; the fifth are quotients of the fourth, and so on. Then exercise them, when the principles of increase and decrease are well understood, on the different columns as directed by the signs $+$, $\times$, and $\div$ —that is by the same totals by multiplying and adding; and reversing processes by subtracting and dividing. In other words, make them know well how numbers increase and decrease by processes of analysis and synthesis, instead of *solely by rote* without the exercise of the understanding.—When these Tables are well understood—the first especially, then take numbers promiscuously, first, to a hundred; and on these let them be exercised, in adding and subtracting, multiplying and dividing,—combining and uncombining them as variously as you can, till they can readily give any result required, as follows:

5) 17 — 27 — 38 — 42 — 70 — 83 — 84

Quotients 3—2—5—2—7—3—8—2—14—16—3—18—4

Make them tell the fives in these numbers, and what, if any, is over, *at sight*, not naming the words—TIMES and OVER; but just the figures 3—2—5—2, &c.

Repeat 7, 8 and 9 up to 49, 85, 96, 37, 29, 18, adding in any units wanted to complete the numbers, *i. e.* 7—14—21—28—35—42—49; 8—16—24—32—40—48—56—64—72—80, and 5 added are 85, and so on. Reverse the process—85 by 8, *viz.* 85—77—69—61—53—45—37—29—21—13—5 remaining.

Lessen 37 successively by 7, three times; and increase it by 8 in succession, four times. Tell me the result?

Halve 96; to the half add 12; from the sum subtract 30; multiply the remainder by 5; add 19, halve the sum, and tell the quotient? Ans. 84—1. Answer to be given when the last word or figure is pronounced.

Halve 82 successively to 20—1. Divide 81 successively by 3 till nothing remains, naming each descending step without hesitation.

Continue such exercises as these—giving them as much variety as possible—till a readiness in answering is acquired; then give higher numbers, just as you find their minds are able to take them in.

JOHN BRUCE,
Inspector of Schools.

(To be Continued.)