

小林義
則編輯

小學

筆算全書
算式

卷之十六

明治四十四年十二月上梓

小林義則編
小林正方校

小學

東京資料館

類算數
屬筆算
冊九
函止

明治四十四年

書答式
卷六

明治十三年十月
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算術

算術

算術全書卷之廿六 答式

小林義則編輯

求積答式

$$\frac{12 \times 68}{2} = 761.6$$

$$\frac{4.55}{2} \times 7.56 = 171.99$$

$$(3) \quad \frac{258}{2} \times 126 \frac{2}{3} = 16340 \frac{4}{5} = 54420 \frac{4}{5}$$

$$(4) \quad (38 \times 6 + 2) + (79 \times 6 + 4) \times \frac{36 \times 6 + 36}{30 \times 2 \times 36} = 7129.4$$

$$(5) \quad \frac{\sqrt{(144)^2 - (72)^2}}{2} \times 144 = 89.784$$

$$(6) \quad \frac{756}{\sqrt{756 \times 2}} = 39.37$$

$$(7) \quad 125 \times 3.1416 = 477.5232$$

$$(8) \quad \frac{471.24}{3.1416} = 150$$

算術全書卷之廿六 答式

- (9) $(625)^2 \times 0.7854 = 30.6796875$
- (10) $(153)^2 \times 0.7854 = 61225.4286$
- (11) $\sqrt{\frac{863 \times 30 + 15}{0.7854}} = 181.6122 +$
- (12) $4\{(27)^2 \times .7854\} = 2290.2264$
- (13) $(3235)^2 \times .7854 = 8219387.715$
- (14) $\frac{4}{3} \times 31416 \times (1617.5)^3 = 17726479505.3$
- (15) $\frac{4}{3} \times 31416 \times (18)^3 = 24429.0816$
- (16) $2 \times \sqrt[3]{\frac{7455 \times 3}{4 \times 31416}} = 11.25$
- (17) $(12.5)^2 \times 50 \times .7854 = 6135.9375$
- (18) $\frac{235.62}{(5)^2 \times 0.7854} = 12^+$
- (19) $\sqrt{\frac{5717}{215 \times .7854}} = 18.4^+$

- (20) $\frac{(45)^2 \times 38 \times .7854}{3} = 20145.51$
- (21) $\frac{8053 \times 3}{(315)^2 \times .7854} = 31^+$
- (22) $\frac{(2)^2 \times 24 \times .7854}{3} = 25.13$
- (23) $(432)^2 \times \frac{388}{3} = 24136.704$
- (24) $\sqrt{\frac{22080 \times 3}{33.5}} = 4^R 26^+$
- (25) $\frac{18}{3} \{(16 + 24)^2 - (16 \times 24)\} = 7296^+$
- (26) $\frac{232}{3} \{(255 + 327)^2 - (25.5 \times 327)\} = 19746.216$
- (27) $\frac{16}{3} \{(10 + 14)^2 - (10 \times 14)\} \times .7854 = 1826.3168$
- (28) $\frac{256}{3} \{(25 + 35)^2 - (25 \times 35)\} \times .7854 = 18263.168$
- (29) $\frac{84}{6} \{(8 \times 2 + 10) \times 5 + (10 \times 2 + 8) \times 7\} = 456.4^+$
- (30) $\frac{495}{6} \{(36 \times 2 + 57) \times 30 + (57 \times 2 + 36) \times 45\} = 87615^+$

$$(31) \quad \frac{7.5}{6} \{ (3.5 \times 2 + 3.5) \times 1.2 \} = 15.75$$

$$(32) \quad \frac{93}{6} \{ 84 \times 65 \} = 84.63$$

$$(33) \quad (75)^2 \times 51 \times .5236 = 150207.75$$

$$(34) \quad (12.4)^3 \times 18.5 \times .5236 = 1489.411616$$

$$(35) \quad \{ ((12)^2 \times .75 \times 4) + 4 \} \times .5236 = 228.2896$$

$$(36) \quad 2 \times 1 \times 4 = 8$$

$$8 = (2)^3 = 64 = 2^3 = 4^2$$

$$8 = (1)^3 = 64 = 2^3 = 2^2$$

$$8 = (4)^3 = 64 = 2^3 = 8^2$$

$$(37) \quad \frac{6.5}{2} \{ (9.5 + 7.5)^2 - (9.5 \times 7.5) \} \times 10 = 7277.25$$

$$(38) \quad \frac{36}{2} \{ (56 + 48)^2 - (56 \times 48) \} \times 7854 \times 10 = 118168 + 648.27$$

$$(39) \quad \frac{4.56}{6} \{ (58 \times 2 + 49) \times 43.5 + (49 \times 2 + 58) \times 31.5 \} \times 10 = 648.27$$

$$= 141754^2 +$$

$$(40) \quad \frac{24}{3} \{ (14 + 16)^2 - (14 \times 16) \} \times 7854 \times 10 = 648.27$$

$$= 16 = 60 = 3 = 14.6 \quad 12.8 \quad 21.9$$

$$(41) \quad \frac{6}{3} \{ (9 + 7)^2 - (9 \times 7) \} \times 10 = 648.27$$

$$= 9 = 120 = 3 = 18.138 + 14.107 + 12.092 +$$

$$(42) \quad (26)^2 - ((26)^2 \times .7854) = 145.069$$

$$(43) \quad (20 \times 8 \times 6) + (\frac{8^2}{2} \times 6) = 1152^+$$

$$(\frac{8^2}{2} \times 6) \times 20 = 3840^+$$

二、計算下列各題

- (44) $2 \times 31416 \times 6 \times 3 = 11309724$
- (45) $\sqrt{\frac{70^2 + (35)^2}{2}} \times 70 - (12)^2 = 2598^{\frac{1}{2}}$
- (46) $(\sqrt{(8)^2 - (4)^2}) \times 12 = 83.04$
- (47) $\{(250 \times 6) \times (32 \times 6)\} - \{36 \times 6 + 2\}^2 \times 7854$
 $= 260674.6504$
- (48) $(154^{\frac{1}{2}} \times 121^{\frac{1}{2}}) - (144^{\frac{1}{2}} \times 111^{\frac{1}{2}}) = 2650$
 $2650 = (2.5 \times 5) = 212^{\frac{1}{2}}$
- (49) $(280.5)^2 \times 7854 - (42)^2 \times 7854 = 6178161.394$
- (50) $\{25.5 \times 30 \times 60\} = 30^{\frac{1}{2}} = 15^{\frac{1}{2}} \times 3^{\frac{1}{2}}$

級數答式

(1) 末 = $7 + (24 - 1)3 = 76^{\frac{1}{2}}$

- (2) 總 = $\frac{4^6}{2} (5 + 276) = 6440^{\frac{1}{2}}$
- (3) 初 = $\frac{156 \times 2 - 8(8-1)5}{2 \times 8} = 2^{\frac{1}{2}}$
 末 = $\frac{2 \times 156 + 8(8-1)5}{2 \times 8} = 37^{\frac{1}{2}}$
- (4) 總 = $\frac{101}{2} (2 \times 1 + (101 - 1) \frac{5}{10}) = 2626^{\frac{1}{2}}$
- (5) 差 = $\frac{37-7}{6-1} = 6$ $7+6=13^{\frac{1}{2}}$ $13+6=19^{\frac{1}{2}}$ 之末
- (6) 末 = $\frac{2 \times 3720}{60} - 3 = 121^{\frac{1}{2}}$
- (7) 總 = $\frac{11}{2} (9 + 109) = 649^{\frac{1}{2}}$
- (8) 差 = $\frac{\frac{1}{2} - \frac{1}{5}}{5-1} = \frac{1}{24}$
- (9) 段 = $\frac{438-20}{3} + 1 = 140 \frac{1}{3}$
- (10) 初 = $\frac{2 \times 950 - 25(25-1)3}{2 \times 25} = 2^{\frac{1}{2}}$
- (11) 項 = $\frac{60-8}{2} + 1 = 27^{\frac{1}{2}}$
- (12) 差 = $\frac{69-51}{4-1} = 6$ $61+6=57^{\frac{1}{2}}$

三、計算下列各題

- (13) 項 = $\frac{320 \times 2}{160} = 4^B$
- (14) 差 = $\frac{3360}{5-1} = 840$ 戊 = $\frac{2 \times 23800 - 5(5-1)840}{2 \times 5} = 3080$
- (15) 初 = $\frac{2 \times 616 - 14(14-1)6}{14 \times 2} = 5^A$
- (16) 項 = $\frac{32-4}{4} + 1 = 8^T$ 第 5 16 次
- (17) 項 = $\frac{2 \times 1854}{412} = 9^B$
- (18) 差 = $\frac{18}{4-1} = 6$ 初 = $\frac{2 \times 240 - 4(4-1)6}{2 \times 4} = 51^W$
- (19) 差 = $\frac{200}{5-1} = 50$ 初 = $\frac{2 \times 850 - 5(5-1)50}{2 \times 5} = 160^T$
- (20) 初 = $\frac{510 \times 2 - 6(6-1)26}{6 \times 2} = 20^W$
- (21) 差 = $\frac{39}{4-1} = 13$ 初 = $\frac{2 \times 218 - 4(4-1)13}{2 \times 4} = 35^W$
- (22) 末 = $5 - (5-1).5 = 3^W$
- (23) 總 = $\frac{7}{2}(370 + 850) = 4270^W$
- (24) 項 = $\frac{69375 - 350}{68.75} + 1 = 6^A$

- (25) 總 = $\frac{7}{2}((86 + 10) + (56 - 10 \times 2)) = 462^A$
- (26) 總 = $\frac{10}{2}(2 \times 1 + (10-1).2) = 19^A$
- (27) 總 = $\frac{27}{2}(1 + 27) = 378^A$
- (28) 總 = $\frac{19}{2}(2 \times 7 + (\frac{19}{3} - 1)1) = 6210^T$
- (29) 項 = $\frac{2 \times 225}{75} = 6^B$
- (30) 項 = $\frac{6.5-5}{2} + 1 = 31^B$
- (31) 總 = $\frac{12}{2}(1 + 12) = 78 \times 4 = 312^A$
- (32) 差 = $\frac{2(22 \times 6 + 4 - 2 \times 7)}{7(7-1)} = \frac{817}{521}$
- 初 = $\frac{2 \times 136 - 7(7-1)5\frac{17}{21}}{2 \times 7} = 2^A$
- (33) $\frac{17-9}{4} = \text{差 } 2$ $\frac{9-2}{2} = 3.5^T$
- (34) 末 = $2 + (18-1)3 = 53^A$
- (35) 差 = $\frac{14-6}{9-1} = 1^W$ 總 = $\frac{9}{2}(6 + 14) = 90^Z$

- (36) 初 = $76 - (26 - 1)3 = 1^{\text{四}}$
 (37) 差 = $\frac{50.5 - 1}{34 - 1} = 1^{\text{個}} \frac{1}{2}$
 (38) 差 = $\frac{9.5 - 3}{14 - 1} = \frac{1}{2} \times 36 = 18^{\text{四}}$
 (39) 差 = $\frac{14 - 2}{7 - 1} = 2^{\text{歲}}$
 (40) 差 = $\frac{92 - 20}{5 - 1} = 18^{\text{十}}$
 (41) 差 = $\frac{98 - 75}{5 - 1} = 5^{\text{度}} 45^{\text{分}}$
 (42) 項 = $\frac{226 - 6}{4} + 1 = 56^{\text{四}}$
 (43) 項 = $\frac{40 - 24}{4} + 1 = 5^{\text{人}}$
 (44) 項 = $\frac{150 - 15}{5} + 1 = 28^{\text{日}}$
 (45) 項 = $\frac{135 - 35}{2} + 1 = 51^{\text{個}}$
 (46) 差 = $\frac{2(5 \times 27 - 8.5)}{5(5 - 1)} = 5^{\text{歲}}$
 (47) 差 = $\frac{2(7 \times 1260 - 5630)}{7(7 - 1)} = 151 \frac{19}{21}$

- (48) 項 = $\frac{12 \times 2}{3} + 12 = 20$
 末 = $12 + (20 - 1)3 = 69^{\text{日}}$
 (49) 總 = $\frac{7}{2}(28 + 126) = 539^{\text{日}}$
 初 = $\frac{2 \times 539}{7} - 126 = 28 + 165 = 445^{\text{日}}$
 (50) 差 = $\frac{124 - 100}{5 - 1} = 6^{\text{步}}$
 $8 = 112 = 1 = x = 14^{\text{步}}$

方級數答式

- (1) 末 = $1 \times 2^{9-1} = 256^{\text{個}}$
 (2) 末 = $2 \times 3^{8-1} = 4374^{\text{個}}$
 (3) 末 = $2 \times 2^{5-1} = 32^{\text{個}}$

- (4) 末 = $3 \times 3^{8-1} = 6561^{\text{個}}$
- (5) 末 = $9 \times 4^{8-1} = 147456^{\text{個}}$
- (6) 末 = $64 \times (\frac{1}{4})^{12-1} = 268435456^{\text{個}}$
- (7) 總 = $\frac{3^8-1}{3-1} \times 2 = 6560^{\text{個}}$
- (8) 總 = $\frac{2^5-1}{2-1} \times 2 = 62^{\text{個}}$
- (9) 總 = $\frac{3^{10}-1}{3-1} \times 2 = 59048^{\text{個}}$
- (10) $(\frac{1}{2})^5 = 1$ $\times 32 = 62^{\text{個}}$
- (11) 總 = $(\frac{1}{4})^3 = 1$ $\times 64 = 84^{\text{個}}$
- (12) 總 = $\frac{4^5-1}{4-1} \times 512 = 174592^{\text{個}}$
- (13) 總 = $\frac{3645 \times 3-5}{3-1} = 5465^{\text{個}}$

- (14) 總 = $\frac{12288 \times 4-3}{4-1} = 16383^{\text{個}}$
- (15) 總 = $\frac{78722 \times 3-4}{3-1} = 118081^{\text{個}}$
- (16) 總 = $\frac{262144 \times \frac{1}{4}-1}{\frac{1}{4}-1} = 349520^{\text{個}}$
- (17) 總 = $\frac{2^{12}-1}{2-1} \times 3 = 12285^{\text{個}}$
- (18) 初 = $\frac{1820(3-1)}{3^6-1} = 5^{\text{個}}$ 末 = $5 \times 3^{6-1} = 1215^{\text{個}}$
- (19) 差 = $\frac{5^5-1}{5-1} = 3$ 6. $18.$ $54.$ $162.$ $436.$
- (20) 總 = $\frac{(\frac{3}{2})^{10}-1}{\frac{3}{2}-1} \times 1 = \frac{50049}{174075}$
- (21) 等 = $\frac{4^4-1}{24} = 2$ 48. $96.$
- (22) 等 = $\frac{9^9-1}{3} = 2$ 6. $12.$ $24.$ $48.$ $96.$ $192.$ $384.$
- (23) 初 = $\frac{1785(2-1)}{2^8-1} = 7^{\text{個}}$

$$(24) \quad \text{末} = 124 \times 2^{6-1} = 3968^{\text{目}} \quad \text{首} = \frac{7812(2-1)}{2^6-1} = 124$$

$$(25) \quad \text{等} = \sqrt[6-1]{\frac{1215}{5}} = 3^{\text{個}}$$

$$(26) \quad \text{末} = 3 \times 2^{8-1} = 384^{\text{個}}$$

$$\text{總} = \frac{2^8-1}{2-1} \times 3 = 765^{\text{人}}$$

$$(27) \quad \text{末} = 20 \times 3^{8-1} = 131220^{\text{目}}$$

$$(28) \quad \text{末} = 50 \times 2^{10-1} = 25600^{\text{目}}$$

$$(29) \quad \text{初} = \frac{1377}{3^5-1} = 17^{\text{目}}$$

$$(30) \quad \text{初} = \frac{2250(2-1)}{2^4-1} = 150^{\text{目}}$$

$$(31) \quad \text{等} = \sqrt[5-1]{\frac{2560}{10}} = 4^{\text{樹}}$$

$$(32) \quad \text{等} = \sqrt[4-1]{\frac{12800}{25}} = 8^{\text{匹}}$$

$$(33) \quad \text{初} = \frac{351(3-1)}{3^3-1} = 27^{\text{角}} \quad 27 \times 3 = 81^{\text{七}} \quad 81 \times 3 = 243^{\text{里}}^{\text{人}}$$

$$(34) \quad \text{總} = \frac{2^3-1}{2-1} \times 153 = 1071^{\text{箱}}$$

$$\text{總} = \frac{(1\frac{1}{2})^3-1}{1\frac{1}{2}-1} \times 235 = 1116.25^{\text{支}} \quad 1071 + 1116.25 = 2187.25$$

$$(35) \quad \text{總} = \frac{64 \times 2-2}{2-1} = 126^{\text{里}}$$

$$(36) \quad \text{末} = 1 \times 3^{4-1} = 27^{\text{尊}}$$

$$(37) \quad \text{總} = \frac{2^3-1}{2-1} \times 76 = 532 \quad 1000 - 532 = 468^{\text{字}}$$

$$(38) \quad \text{等} = \sqrt[3-1]{\frac{26364}{12}} = 146 +$$

$$(39) \quad \text{初} = \sqrt[5]{\frac{512}{8}} = 4^{\text{目}} \quad 8^{\text{目}} \quad 16^{\text{目}} \quad 32^{\text{目}}$$

$$(40) \quad \text{初} = \frac{720}{2^5-1} = 45^{\text{錢}} \quad \text{總} = \frac{2^5-1}{2-1} \times 720 = 2304^{\text{合}}^{\text{錢}}$$

$$(41) \quad 196 = 28 = 7^{\text{寸}} \quad \text{末} = 28 \times 7^{8-1} = 23059204^{\text{升}}$$

- (42) 等 = $\frac{1625}{325} = 5$ $1625 \times 5 = 8125^{\text{丁}}$
- (43) 等 = $\sqrt[3]{\frac{50}{8}} = 2.5$ $8 \div 2.5 = 3.2^{\text{丁}}$ $3.2 \div 2.5 = 1.28^{\text{合茂}}$
- (44) 等 = $\sqrt[3]{\frac{110700}{3075}} = 6$ $1107.00 \times 6 = 6642^{\text{丁}}$
- (45) 等 = $\sqrt[5]{\frac{10125}{2000}} = \frac{3}{2} = 1.5$ 總 = $\frac{(\frac{3}{2})^5 - 1}{\frac{3}{2} - 1} \times 20 = 2637.5^{\text{合茂}}$
- (46) 總 = $\frac{8^6 - 1}{8 - 1} \times 2 = 74898^{\text{丁}}$
- (47) 總 = $\frac{4^3 - 1}{4 - 1} \times 10 = 210 + 35.6 = 245.6^{\text{丁}}$
- (48) 次 = $3875 \times 5^{3-1} = 96875$
- (49) 差 = $\sqrt[3]{\frac{135}{5}} = 3$ $\frac{5}{4} = 1.25$ $1.25 \times 3 = 3.75$ $3.75 \times 3 = 11.25^{\text{丙}}$
- (50) 等 = $\sqrt[4]{\frac{162}{2}} = 3$ $\frac{2}{4} = 50$ $50 \times 3 = 150$ $150 \times 3 = 450^{\text{合茂}}$
- 450 × 3 = 1350^丁
- 小林正方校

小學算全書卷之十六 答式終

神奈川縣 師範學校	小林義則編輯書目	八原善一 林 仰阿屋 伊 衛 新後記
改正小學書取本	全	一 小學讀本索引
小學通常物問答	全	一 讀日本地誌略字引全
小學人體部分問答	全	一 日本略史字解
同 附編	一 軸	一 萬國地誌略字引
小學口授文	兼用暗算 二 冊	一 日本略史問答
小學作文千五百題	全	一 日本地誌略問答
小學筆算全書	上 讀藏	一 小學教授要本
小學和算新書	六 冊	一 女 學裁縫新書
同 暗算教授書	卷五 讀藏	一 小學諸禮新書

[illegible]

發兌書肆

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