

**KEY TO RAUB'S
COMPLETE
ARITHMETIC**

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Key to Raub's Complete Arithmetic by Albert N. Raub

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ALBERT N. RAUB

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COMPLETE
ARITHMETIC**

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TO
RAUB'S
COMPLETE ARITHMETIC.

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"PLAIN EDUCATIONAL TALES," ETC.



PORTER & COATES,
PHILADELPHIA.

✓
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PREFACE.

THE plan of this Key is such as to need but little explanation. The solutions will be found numbered and paged to correspond with the problems in the *Complete Arithmetic*. In some cases suggestions only are given, in preference to full solutions.

The Author would advise that those who use the Key use it as little as possible in the way of gaining help. They should use it rather in the way of comparing their own solutions with those in the book. In this manner it may be useful to either teacher or pupil, just as an instructor is useful in giving hints or verifying solutions and results.

A. N. R.

STATE NORMAL SCHOOL, }
LOCK HAVEN, PA., }
JAN. 1, 1879.

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KEY

TO

RAUB'S COMPLETE ARITHMETIC.

ADDITION.

PAGE 23.

The answers only to these questions are given :

- | | | |
|----------------|---------------|--------------|
| (19.) 940932. | (22.) 872926. | (25.) 13812. |
| (20.) 1129236. | (23.) 16301. | (26.) 12422. |
| (21.) 1114330. | (24.) 16376. | (27.) 14079. |
-
- | | |
|---|--|
| (28.) \$6420 = A's.
5130 = B's.
11550 = C's.
<hr style="width: 100%;"/> \$23100 = All. | (29.) \$3500 = Cost of house.
7800 = " " farm.
11300 = " " store.
<hr style="width: 100%;"/> 14800 = " " mill.
<hr style="width: 100%;"/> \$37400 = " " all. |
|---|--|
-
- | | |
|---|--|
| (30.) 327 miles.
462 " "
194 " "
<hr style="width: 100%;"/> 983 miles. Distance E. | 349 miles.
621 " "
347 " "
<hr style="width: 100%;"/> 1317 miles. Distance W.
983 mi. + 1317 miles = 2300 miles. <i>Ans.</i> |
|---|--|
-
- | | |
|---|--|
| (32.) 21 degrees below.
105 " " above.
<hr style="width: 100%;"/> 126 degrees = Difference. | |
|---|--|
-
- | | |
|---|--|
| (33.) 911 miles E. of Chicago.
401 " " W. of Chicago.
<hr style="width: 100%;"/> 1312 miles = Dis. apart. | |
|---|--|

SUBTRACTION.

- (34.) 1312 miles E. of Omaha.
1961 " W. of Omaha.
 3273 miles - Dis. from New York to San Francisco.

- (35.) \$5500, Wife's.
 3200 }
 3200 } Each son.
 3200 }
 3200 }
 2800 }
 2800 } Each daughter.
 2800 }
 1950, Church.
 2430, School.

 \$31080 - Estate.

SUBTRACTION.

PRACTICAL PROBLEMS, PAGE 30.

- (9.) \$6720, Farm.
 3740, House.
 10160, Store.
 \$20620 - Cost of all.
 \$25000 - \$20620 = \$4380 - Gain.
- (10.) \$900
 1205
 2105. Income.
 \$2105 - \$1425 = \$680. *Ans.*
- (11.) \$1200
 325
 220
 \$1745
 \$2500 - \$1745 = \$755. *Ans.*
- (12.) \$7334
 8627
 15961 - \$12500 = \$3461. *Ans.*

- (13.)
$$\begin{array}{r} 225 \\ \underline{217} \\ 640 - 442 = 198. \text{ Remainder.} \\ 500 - 198 = 302. \text{ Ans.} \end{array}$$
- (14.)
$$\begin{array}{r} 720 \text{ lbs.} \\ \underline{617} \text{ " "} \\ 1337 \text{ lbs.} \end{array} \qquad \begin{array}{r} 327 \text{ lbs.} \\ \underline{445} \text{ " "} \\ 772 \text{ lbs.} \end{array} \quad \begin{array}{l} \text{Amt. sold.} \\ \text{Ans.} \end{array}$$

$$1337 \text{ lbs.} - 772 \text{ lbs.} = 565 \text{ lbs.}$$

MULTIPLICATION.

PRACTICAL PROBLEMS, PAGE 37.

- (17.) 91 miles + 85 miles = 176 miles, distance they approach each other in one day.
 $24 \times 176 \text{ miles} = 4224 \text{ miles.}$
 $4500 \text{ miles} - 4224 \text{ miles} = 276 \text{ miles. Ans.}$
- (18.) 75 miles + 85 miles = 160 miles, distance they recede from each other in one day.
 $15 \times 160 \text{ miles} = 2400 \text{ miles. Ans.}$
- (19.) 204 miles - 127 miles = 77 miles, distance gained in 1 day.
 $9 \times 77 \text{ miles} = 693 \text{ miles. Ans.}$

DIVISION.

PAGE 40.

19. If they hire the horse out for 25 days at 4 dollars a day, they receive 25 times 4 dollars, or 100 dollars; if they sell him for 120 dollars, they receive altogether 100 dollars and 120 dollars, or 220 dollars; hence, they gain on the horse 220 dollars minus 160 dollars, which is 60 dollars, or 12 dollars each.