A PROGRESSIVE COURSE OF EXAMPLES IN ARITHMETIC

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649061037

A Progressive Course of Examples in Arithmetic by James Watson

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

JAMES WATSON

A PROGRESSIVE COURSE OF EXAMPLES IN ARITHMETIC

Trieste

LONDON:
R. CLAY, PRINTER, BREAD STREET HILL.

A

PROGRESSIVE COURSE

OF

EXAMPLES IN ARITHMETIC.

BY THE

REV. JAMES WATSON, M.A.

OF CORPUS CHRISTI COLLEGE, CAMBRIDGE,
AND SENIOR MATHEMATICAL MASTER OF THE ORDNANCE SCHOOL, CARSHALTON.

LONDON:
BELL AND DALDY, 186, FLEET STREET.
1855.

181. c. 65.

THE following Work has been drawn up with a view of supplying the want which the Author has felt in his own experience, of a course of Arithmetical Examples, adapted to the use of the more advanced Mathematical Schools, which may be placed in the hands of each pupil, and thereby save the time which is lost in dictating, or otherwise setting Questions to a Class. The Examples were originally prepared for the use of the Ordnance School, at Carshalton; but the Author has been induced to offer them generally to the public, in the hope that they may prove useful to others, who have experienced the same want as himself.

Many of the Examples in the following pages are original, whilst many others have been selected from the Cambridge, and Military, and other public Examination Papers.

TABLE OF CONTENTS.

Ex.		Page
I.	Numeration	1
II.	Notation	1
III.	Simple Rules	2
IV.	Reduction	3
V.	Compound Addition and Subtraction	4
VI.	Compound Multiplication	5
VII.	Compound Division, Case I.	6
VIII.	„ „ Case II.	7
IX.	Miscellaneous Examples	7
X.	Greatest Common Measure	13
XI.	Least Common Multiple, Case I.	13
XII.	„ „ Case II.	14
	Vulgar Fractions:—	
XIII.	Reduction of Fractions to their Lowest Terms	14
XIV.	Reduction of Mixed Numbers	15
XV.	Reduction of Improper Fractions	15
XVI.	Reduction of Fractions to their Least Common Denominator	15
XVII.	Reduction of Compound Fractions	15
XVIII.	Addition	16
XIX.	Subtraction, Case I.	17
XX.	„ Case II.	17
XXI.	Multiplication	18
XXII.	Division	18
XXIII.	Simplification of Mixed Fractional Expressions	18
XXIV.	Valuation of Concrete Fractions	22
XXV.	To express one Quantity in Terms of another	23
XXVI.	Miscellaneous Examples in Fractions	24
	Decimal Fractions:—	
XXVII.	Addition	28
XXVIII.	Subtraction	28

Ex.		Page
XXIX.	Multiplication	28
XXX.	Division	29
XXXI.	Reduction of Vulgar Fractions to Decimals	30
XXXII.	Reduction of Decimals to Vulgar Fractions	30
XXXIII.	Addition of Recurring Decimals	31
XXXIV.	Subtraction of Ditto	31
XXXV.	Multiplication of Ditto	32
XXXVI.	Division of Ditto	32
XXXVII.	Valuation of Concrete Decimals	33
XXXVIII.	To express one quantity as a Decimal of another	34
XXXIX.	Miscellaneous Examples in Decimals	35
XL.	Practice, Case I.	38
XLI.	„ Case II.	38
XLII.	Simple Proportion	40
XLIII.	Compound Proportion	44
XLIV.	Proportional Parts	47
XLV.	Inverse Proportion	49
XLVI.	The Chain Rule	51
XLVII.	Interest, Case I.	52
XLVIII.	„ Case II.	53
XLIX.	„ Case III.	54
L.	Discount	56
LI.	Stocks	57
LII.	Profit and Loss	60
LIII.	Areas and Volumes	62
LIV.	Square Root	66
LV.	Cube Root	66
LVI.	Miscellaneous Examples in Evolution	67