Arithmetic and Pre-Algebra Workbook

Comprehensive Activities for Mastering Essential Math Skills

- Dynamic design and easy-to-follow activities
- A fun, interactive and concrete learning process
- Targeted, skill-building practices
- Fun exercises that build confidence
- All solutions for the exercises are included, so you will always find the answers

Reza Nazari & Ava Ross

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Comprehensive Activities for Mastering Essential Math Skills

By

Reza Nazari

& Ava Ross

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All inquiries should be addressed to:

info@effortlessMath.com

www.EffortlessMath.com

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Description

Arithmetic and Pre-Algebra Workbook provides students with the confidence and math skills they need to succeed in any math course they choose and prepare them for future study of Algebra, Geometry, Pre-Calculus and Calculus, providing a solid foundation of basic Math topics with abundant exercises for each topic. It is designed to address the needs of math students who must have a working knowledge of basic Math and pre-algebra.

Inside the pages of this comprehensive Workbook, students can learn basic math operations in a structured manner with a complete study program to help them understand essential math skills. It also has many exciting features, including:

- Dynamic design and easy-to-follow activities
- A fun, interactive and concrete learning process
- Targeted, skill-building practices
- Fun exercises that build confidence
- All solutions for the exercises are included, so you will always find the answers

Arithmetic and Pre-Algebra Workbook is an incredibly useful tool for those who want to review all topics being taught in Pre-algebra courses. It efficiently and effectively reinforces learning outcomes through engaging questions and repeated practice, helping you to quickly master basic Math skills.



About the Author

Reza Nazari is the author of more than 100 Math learning books including:
– Math and Critical Thinking Challenges: For the Middle and High School Student
– GED Math in 30 Days.
– ASVAB Math Workbook 2018 - 2019
– Effortless Math Education Workbooks
– and many more Mathematics books …

Reza is also an experienced Math instructor and a test–prep expert who has been tutoring students since 2008. Reza is the founder of Effortless Math Education, a tutoring company that has helped many students raise their standardized test scores—and attend the colleges of their dreams. Reza provides an individualized custom learning plan and the personalized attention that makes a difference in how students view math.

To ask questions about Math, you can contact Reza via email at:
reza@EffortlessMath.com

Find Reza's professional profile at:
goo.gl/zoC9rJ

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Chapter 1: Arithmetic

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1–10 Factoring Numbers

1–11 Greatest Common Factor

1–12 Least Common Multiple

1-1 Simplifying Fractions

Simplify the fractions.

1) $\frac{22}{36}$

2) $\frac{8}{10}$

3) $\frac{12}{18}$

4) $\frac{6}{8}$

5) $\frac{13}{39}$

6) $\frac{5}{20}$

7) $\frac{16}{36}$

8) $\frac{18}{36}$

9) $\frac{20}{50}$

10) $\frac{6}{54}$

11) $\frac{45}{81}$

12) $\frac{21}{28}$

13) $\frac{35}{56}$

14) $\frac{52}{64}$

15) $\frac{13}{65}$

16) $\frac{44}{77}$

17) $\frac{21}{42}$

18) $\frac{15}{36}$

19) $\frac{9}{24}$

20) $\frac{20}{80}$

21) $\frac{25}{45}$

1-2 Adding and Subtracting Fractions

Add fractions.

1) $\frac{2}{3}+\frac{1}{2}$

2) $\frac{3}{5}+\frac{1}{3}$

3) $\frac{5}{6}+\frac{1}{2}$

4) $\frac{7}{4}+\frac{5}{9}$

5) $\frac{2}{5}+\frac{1}{5}$

6) $\frac{3}{7}+\frac{1}{2}$

7) $\frac{3}{4}+\frac{2}{5}$

8) $\frac{2}{3}+\frac{1}{5}$

9) $\frac{16}{25}+\frac{3}{5}$

Subtract fractions.

10) $\frac{4}{5}-\frac{2}{5}$

11) $\frac{3}{5}-\frac{2}{7}$

12) $\frac{1}{2}-\frac{1}{3}$

13) $\frac{8}{9}-\frac{3}{5}$

14) $\frac{3}{7}-\frac{3}{14}$

15) $\frac{4}{15}-\frac{1}{10}$

16) $\frac{3}{4}-\frac{13}{18}$

17) $\frac{5}{8}-\frac{2}{5}$

18) $\frac{1}{2}-\frac{1}{9}$

1-3 Multiplying and Dividing Fractions

Multiplying fractions. Then simplify.

1) $\frac{1}{5} \times \frac{2}{3}$

2) $\frac{3}{4} \times \frac{2}{3}$

3) $\frac{2}{5} \times \frac{3}{7}$

4) $\frac{3}{8} \times \frac{1}{3}$

5) $\frac{3}{5} \times \frac{2}{5}$

6) $\frac{7}{9} \times \frac{1}{3}$

7) $\frac{2}{3} \times \frac{3}{8}$

8) $\frac{1}{4} \times \frac{1}{3}$

9) $\frac{5}{7} \times \frac{7}{12}$

Dividing fractions.

10) $\frac{2}{9} \div \frac{1}{4}$

11) $\frac{1}{2} \div \frac{1}{3}$

12) $\frac{6}{11} \div \frac{3}{4}$

13) $\frac{11}{14} \div \frac{1}{10}$

14) $\frac{3}{5} \div \frac{5}{9}$

15) $\frac{1}{2} \div \frac{1}{2}$

16) $\frac{3}{5} \div \frac{1}{5}$

17) $\frac{12}{21} \div \frac{3}{7}$

18) $\frac{5}{14} \div \frac{9}{10}$

1-4 Adding and Subtracting Mixed Numbers

Add.

1) $4\frac{1}{2}+5\frac{1}{2}$

2) $2\frac{3}{8}+3\frac{1}{8}$

3) $5\frac{3}{5}+5\frac{1}{5}$

4) $1\frac{1}{3}+2\frac{2}{3}$

5) $5\frac{1}{6}+5\frac{1}{2}$

6) $3\frac{1}{3}+1\frac{1}{3}$

7) $1\frac{10}{11}+1\frac{1}{3}$

8) $2\frac{3}{6}+1\frac{1}{2}$

9) $5\frac{3}{5}+5\frac{1}{5}$

10) $7+\frac{1}{5}$

11) $1\frac{5}{7}+\frac{1}{3}$

12) $2\frac{1}{4}+1\frac{2}{4}$

Subtract.

13) $4\frac{1}{2}-3\frac{1}{2}$

14) $3\frac{3}{8}-3\frac{1}{8}$

15) $6\frac{3}{5}-5\frac{1}{5}$

16) $2\frac{1}{3}-1\frac{2}{3}$

17) $6\frac{1}{6}-5\frac{1}{2}$

18) $3\frac{1}{3}-1\frac{1}{3}$

19) $2\frac{10}{11}-1\frac{1}{3}$

20) $2\frac{1}{2}-1\frac{1}{2}$

21) $6\frac{3}{5}-2\frac{1}{5}$

22) $7\frac{2}{5}-1\frac{1}{5}$

23) $2\frac{5}{7}-1\frac{1}{3}$

24) $2\frac{1}{4}-1\frac{1}{2}$

1-5 Multiplying and Dividing Mixed Numbers

Find each product.

1) $1\frac{2}{3} \times 1\frac{1}{4}$

2) $1\frac{3}{5} \times 1\frac{2}{3}$

3) $1\frac{2}{3} \times 3\frac{2}{7}$

4) $4\frac{1}{8} \times 1\frac{2}{5}$

5) $2\frac{2}{5} \times 3\frac{1}{5}$

6) $1\frac{1}{3} \times 1\frac{2}{3}$

7) $1\frac{5}{8} \times 2\frac{1}{2}$

8) $3\frac{2}{5} \times 2\frac{1}{5}$

9) $2\frac{2}{3} \times 4\frac{1}{4}$

10) $2\frac{3}{5} \times 1\frac{2}{4}$

11) $1\frac{1}{3} \times 1\frac{1}{4}$

12) $3\frac{2}{5} \times 1\frac{1}{5}$

Find each quotient.

13) $2\frac{1}{5} \div 2\frac{1}{2}$

14) $2\frac{3}{5} \div 1\frac{1}{3}$

15) $3\frac{1}{6} \div 4\frac{2}{3}$

16) $1\frac{2}{3} \div 3\frac{1}{3}$

17) $4\frac{1}{8} \div 2\frac{2}{4}$

18) $3\frac{1}{2} \div 2\frac{3}{5}$

19) $3\frac{5}{9} \div 1\frac{2}{5}$

20) $2\frac{2}{7} \div 1\frac{1}{2}$

21) $3\frac{1}{5} \div 1\frac{1}{2}$

22) $4\frac{3}{5} \div 2\frac{1}{3}$

23) $6\frac{1}{6} \div 1\frac{2}{3}$

24) $2\frac{2}{3} \div 1\frac{1}{3}$

1-6 Adding and Subtracting Decimals

Add and subtract decimals.

1) $\begin{array}{r} 15.14 \\ -\ 12.18 \\ \hline \end{array}$

2) $\begin{array}{r} 65.72 \\ +\ 43.67 \\ \hline \end{array}$

3) $\begin{array}{r} 82.56 \\ +\ 12.28 \\ \hline \end{array}$

4) $\begin{array}{r} 34.18 \\ -\ 23.45 \\ \hline \end{array}$

5) $\begin{array}{r} 90.37 \\ +\ 56.97 \\ \hline \end{array}$

6) $\begin{array}{r} 45.78 \\ -\ 23.39 \\ \hline \end{array}$

Solve.

7) ____ + 1.3 = 4.8

8) 4.2 + ____ = 11.6

9) 9.9 + ____ = 16

10) 6.9 + ____ = 16.4

11) ____ + 5.1 = 8.6

12) ____ + 7.9 = 15.2