ASVAB

MATH Practice Workbook 2022

The Most Comprehensive Review for the Math Section of the ASVAB TEST

2 full-length ASVAB Math practice tests

Test Taker's #1 Choice

Comprehensive ASVAB MATH WorkBook

- ✓ Hone Your Math Skills
- ✓ Boost Your Confidence
- ✓ Overcome Your Exam Anxiety

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Reza Nazari

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2022

The Most Comprehensive Review for the Math Section of the ASVAB Test

By

Reza Nazari

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Welcome to
ASVAB Math Prep
2022



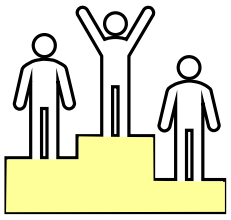
Thank you for choosing Effortless Math for your ASVAB Math test preparation and congratulations on making the decision to take the ASVAB test! It's a remarkable move you are taking, one that shouldn't be diminished in any capacity.

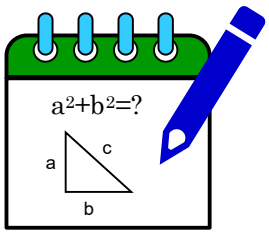


That's why you need to use every tool possible to ensure you succeed on the test with the highest possible score, and this extensive math workbook is one such tool.

If math has never been a strong subject for you, don't worry! This book along with our online ASVAB Math resources will help you prepare for (and even ACE) the ASVAB Math test. As test day draws nearer, effective preparation becomes increasingly more important. Thankfully, you have this comprehensive workbook to help you get ready for the test. With this book and Effortless Math online resources, you can feel confident that you will be more than ready for the ASVAB Math test when the time comes.

First and foremost, it is important to note that this book is a workbook and not a textbook. Every lesson of this practice book was carefully developed to ensure that you are making the most effective use of your time while preparing for the test. This up-to-date book reflects the 2022 test guidelines and will put you on the right track to hone your math skills, overcome exam anxiety, and boost your confidence, so that you can have your best to succeed on the ASVAB Math test.



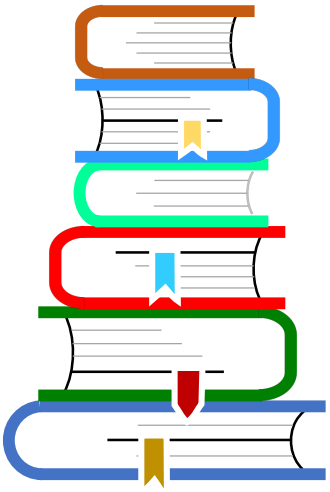


This exercise book will:

- ☑ Explain the format of the ASVAB Math test.
- ☑ Describe specific test-taking strategies that you can use on the test.
- ☑ Provide ASVAB Math test-taking tips.
- ☑ Help you identify the areas in which you need to concentrate your study time.
- ☑ Offer exercises that help you develop the basic math skills you will learn in each section.
- ☑ Give **2 realistic and full-length practice tests** (featuring new question types) with detailed answers to help you measure your exam readiness and build confidence.

This resource contains comprehensive practice questions and exercises that you will need to prepare for the ASVAB Math test. You'll get numerous skill building exercises as well as tips and techniques on how to prepare for your ASVAB math test.

In addition, in the following pages you'll find:



- **How to Use This Book Effectively** – This section provides you with step-by-step instructions on how to get the most out of this comprehensive study guide.
- **How to study for the ASVAB Math Test** – A six-step study program has been developed to help you make the best use of this book and prepare for your ASVAB Math test. Here you'll find tips and strategies to guide your study program and help you understand ASVAB Math and how to ace the test.
- **ASVAB Math Review** – Learn everything you need to know about the ASVAB Math test.

Simplifying Ratios

Simplify each ratio.

1) $3:21 = ___:___$

2) $4:16 = ___:___$

3) $\frac{2}{28} = -$

4) $\frac{18}{45} = -$

5) $10:30 = ___:___$

6) $5:30 = ___:___$

7) $\frac{34}{38} = -$

8) $\frac{45}{63} = -$

9) $10:45 = ___:___$

10) $20:30 = ___:___$

11) $\frac{40}{64} = -$

12) $\frac{10}{110} = -$

13) $8:12 = ___:___$

14) $16:20 = ___:___$

15) $\frac{24}{48} = -$

16) $\frac{21}{77} = -$

17) $8:24 = ___:___$

18) $9 \text{ to } 36 = ___:___$

19) $\frac{64}{72} = -$

20) $\frac{45}{60} = -$

21) $12:15 = ___:___$

22) $18:54 = ___:___$

23) $\frac{36}{54} = -$

24) $\frac{48}{104} = -$

25) $12:48 = ___:___$

26) $18:72 = ___:___$

27) $\frac{15}{75} = -$

28) $\frac{46}{52} = -$



Proportional Ratios

Solve each proportion for x.

1) $\frac{4}{7} = \frac{8}{x}, x = ____$
2) $\frac{9}{12} = \frac{x}{8}, x = ____$
3) $\frac{3}{5} = \frac{12}{x}, x = ____$
4) $\frac{3}{10} = \frac{x}{50}, x = ____$
5) $\frac{3}{11} = \frac{15}{x}, x = ____$
6) $\frac{6}{15} = \frac{x}{45}, x = ____$
7) $\frac{6}{19} = \frac{12}{x}, x = ____$
8) $\frac{7}{16} = \frac{x}{32}, x = ____$
9) $\frac{18}{21} = \frac{54}{x}, x = ____$
10) $\frac{13}{15} = \frac{39}{x}, x = ____$
11) $\frac{9}{13} = \frac{72}{x}, x = ____$
12) $\frac{8}{30} = \frac{x}{180}, x = ____$
13) $\frac{3}{19} = \frac{9}{x}, x = ____$
14) $\frac{1}{3} = \frac{x}{90}, x = ____$
15) $\frac{25}{45} = \frac{x}{9}, x = ____$
16) $\frac{1}{6} = \frac{9}{x}, x = ____$
17) $\frac{7}{9} = \frac{63}{x}, x = ____$
18) $\frac{54}{72} = \frac{x}{8}, x = ____$
19) $\frac{32}{40} = \frac{4}{x}, x = ____$
20) $\frac{21}{42} = \frac{x}{6}, x = ____$
21) $\frac{56}{72} = \frac{7}{x}, x = ____$
22) $\frac{1}{14} = \frac{x}{42}, x = ____$
23) $\frac{5}{7} = \frac{75}{x}, x = ____$
24) $\frac{30}{48} = \frac{x}{8}, x = ____$
25) $\frac{36}{88} = \frac{9}{x}, x = ____$
26) $\frac{62}{68} = \frac{x}{34}, x = ____$
27) $\frac{42}{60} = \frac{x}{10}, x = ____$
28) $\frac{8}{9} = \frac{x}{108}, x = ____$
29) $\frac{40}{6} = \frac{x}{3}, x = ____$
30) $\frac{88}{121} = \frac{x}{11}, x = ____$
31) $\frac{10}{24} = \frac{x}{48}, x = ____$
32) $\frac{32}{80} = \frac{x}{10}, x = ____$

Create Proportion

State if each pair of ratios form a proportion.

1) $\frac{3}{8}$ and $\frac{24}{50}$

2) $\frac{3}{11}$ and $\frac{6}{22}$

3) $\frac{4}{5}$ and $\frac{16}{20}$

4) $\frac{5}{11}$ and $\frac{12}{33}$

5) $\frac{5}{10}$ and $\frac{15}{30}$

6) $\frac{4}{13}$ and $\frac{8}{24}$

7) $\frac{6}{9}$ and $\frac{24}{36}$

8) $\frac{7}{12}$ and $\frac{14}{20}$

9) $\frac{3}{8}$ and $\frac{27}{72}$

10) $\frac{12}{20}$ and $\frac{36}{60}$

11) $\frac{11}{12}$ and $\frac{55}{60}$

12) $\frac{12}{15}$ and $\frac{24}{25}$

13) $\frac{15}{19}$ and $\frac{20}{38}$

14) $\frac{10}{14}$ and $\frac{40}{56}$

15) $\frac{11}{13}$ and $\frac{44}{39}$

16) $\frac{15}{16}$ and $\frac{30}{32}$

17) $\frac{17}{19}$ and $\frac{34}{48}$

18) $\frac{5}{18}$ and $\frac{15}{54}$

19) $\frac{3}{14}$ and $\frac{18}{42}$

20) $\frac{7}{11}$ and $\frac{14}{32}$

21) $\frac{8}{11}$ and $\frac{32}{44}$

22) $\frac{8}{14}$ and $\frac{24}{54}$

Solve.

23) The ratio of boys to girls in a class is $3:4$. If there are 27 boys in the class, how many girls are in that class? _____

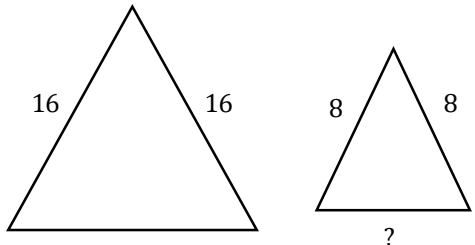
24) The ratio of red marbles to blue marbles in a bag is $5:6$. If there are 66 marbles in the bag, how many of the marbles are red? _____

25) You can buy 6 cans of green beans at a supermarket for $\$3.60$. How much does it cost to buy 48 cans of green beans? _____

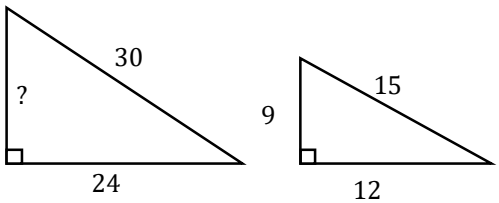
Similarity and Ratios

Each pair of figures is similar. Find the missing side.

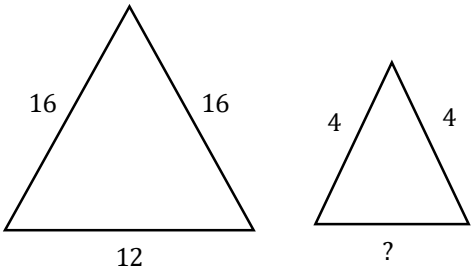
1)



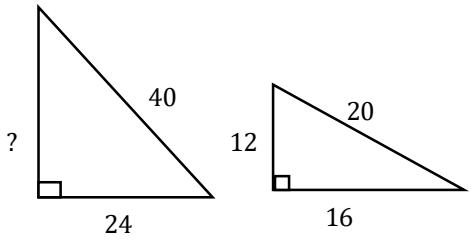
2)



3)



4)



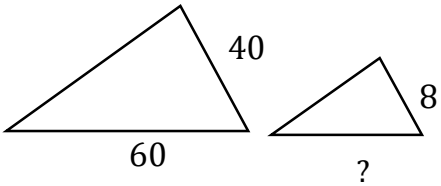
5)



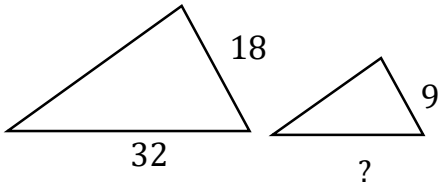
6)



7)



8)





Simple Interest

Determine the simple interest for these loans.

1) $400 at 6% for 4 years. $___
2) $580 at 3.5% for 5 years. $_
3) $320 at 4% for 6 years. $___
4) $510 at 8% for 3 years. $___
5) $690 at 5% for 6 months. $___
6) $620 at 7% for 3 years. $___
7) $650 at 4.5% for 10 years. $___
8) $850 at 4% for 2 years. $___
9) $640 at 7% for 3 years. $___
10) $300 at 9% for 9 months. $___
11) $760 at 8% for 2 years. $_
12) $910 at 5% for 5 years. $___
13) $540 at 3% for 6 years. $___
14) $780 at 2.5% for 4 years. $___
15) $1,600 at 7% for 3 months. $___
16) $310 at 4% for 4 years. $___
17) $950 at 6% for 5 years. $___
18) $280 at 8% for 7 years. $___
19) $310 at 6% for 3 years. $___
20) $990 at 5% for 4 months. $____
21) $380 at 6% for 5 years. $___
22) $580 at 6% for 4 years. $___
23) $1,200 at 4% for 5 years. $___
24) $3,100 at 5% for 6 years. $___
25) $5,20 at 8% for 2 years. $___
26) $1,400 at 4% for 3 years. $___
27) $300 at 3% for 8 months. $___
28) $150 at 3.5% for 4 years. $___
29) $170 at 6% for 2 years. $___
30) $940 at 8% for 5 years. $___
31) $960 at 1.5% for 8 years. $_
32) $240 at 5% for 4 months. $___
33) $280 at 2% for 5 years. $___
34) $880 at 3% for 2 years. $___
35) $2,200 at 4.5% for 2 years. $___
36) $2,400 at 7% for 3 years. $___
37) $1,800 at 5% for 6 months. $___
38) $190 at 4% for 2 years. $___
39) $480 at 6% for 5 years. $___
40) $700 at 5% for 6 years. $_

Answers – Chapter 4

Simplifying Ratios

1) $1:7$
2) $1:4$
3) $\frac{1}{14}$
4) $\frac{2}{5}$
5) $1:3$
6) $1:6$
7) $\frac{17}{19}$
8) $\frac{5}{7}$
9) $2:9$
10) $2:3$
11) $\frac{5}{8}$
12) $\frac{1}{11}$
13) $2:3$
14) $4:5$
15) $\frac{1}{2}$
16) $\frac{3}{11}$
17) $1:3$
18) 1 to 4
19) $\frac{8}{9}$
20) $\frac{3}{4}$
21) $4:5$
22) $1:3$
23) $\frac{2}{3}$
24) $\frac{6}{13}$
25) $1:4$
26) $1:4$
27) $\frac{1}{5}$
28) $\frac{23}{26}$

Proportional Ratios

1) $x = 14$
2) $x = 6$
3) $x = 20$
4) $x = 15$
5) $x = 55$
6) $x = 18$
7) $x = 38$
8) $x = 14$
9) $x = 63$
10) $x = 45$
11) $x = 104$
12) $x = 48$
13) $x = 57$
14) $x = 30$
15) $x = 5$
16) $x = 54$
17) $x = 81$
18) $x = 6$
19) $x = 5$
20) $x = 3$
21) $x = 9$
22) $x = 3$
23) $x = 105$
24) $x = 5$
25) $x = 22$
26) $x = 31$
27) $x = 7$
28) $x = 96$
29) $x = 20$
30) $x = 8$
31) $x = 20$
32) $x = 4$