The Ultimate Step by Step Guide
to Preparing for the ATI TEAS 6 Math Test

Test taker's #1 Choice

ATI TEAS 6 Math 2022

for Beginners

Reza Nazari

✓ Recommended by Test Prep Experts

ATI TEAS 6 MATH FOR BEGINNERS

The Ultimate Step by Step Guide to Preparing for the ATI TEAS 6 Math Test

By

Reza Nazari



About Effortless Math Education

Effortless Math Education operates the www.effortlessmath.com website, which prepares and publishes Test prep and Mathematics learning resources. Effortless Math authors' team strives to prepare and publish the best quality Mathematics learning resources to make learning Math easier for all. We Help Students Learn to Love Mathematics.

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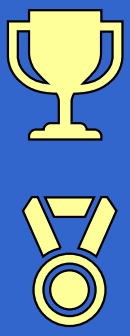
All inquiries should be addressed to:
info@EffortlessMath.com
www.EffortlessMath.com

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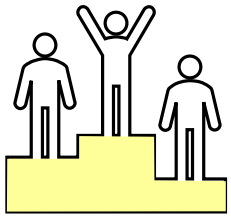
Welcome to
ATI TEAS 6 Math Prep 2022

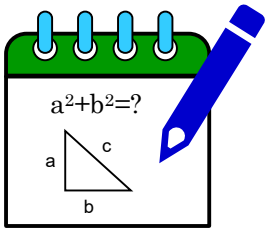


Thank you for choosing Effortless Math for your ATI TEAS 6 Math test preparation and congratulations on making the decision to take the ATI TEAS 6 test! It's a remarkable move you are taking, one that shouldn't be diminished in any capacity. That's why you need to use every tool possible to ensure you succeed on the test with the highest possible score, and this extensive study guide is one such tool.

If math has never been a strong subject for you, **don't worry**! This book will help you prepare for (and even ACE) the ATI TEAS 6 test's math section. As test day draws nearer, effective preparation becomes increasingly more important. Thankfully, you have this comprehensive study guide to help you get ready for the test. With this guide, you can feel confident that you will be more than ready for the ATI TEAS 6 Math test when the time comes.

First and foremost, it is important to note that this book is a study guide and not a textbook. It is best read from cover to cover. Every lesson of this "self-guided math 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 guide 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 ATI TEAS 6 Math test.



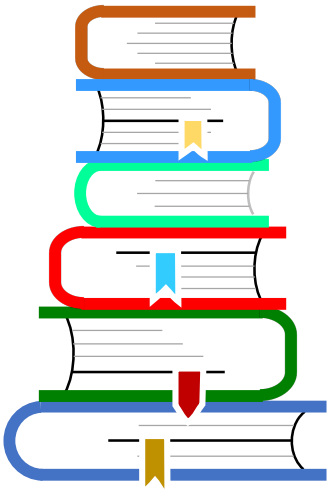


This study guide will:

- ☑ Explain the format of the ATI TEAS 6 Math test.
- ☑ Describe specific test-taking strategies that you can use on the test.
- ☑ Provide ATI TEAS 6 Math test-taking tips.
- ☑ Review all ATI TEAS 6 Math concepts and topics you will be tested on.
- ☑ 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 everything you will ever need to succeed on the ATI TEAS 6 Math test. You'll get in-depth instructions on every math topic as well as tips and techniques on how to answer each question type. You'll also get plenty of practice questions to boost your test-taking confidence.

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 ATI TEAS 6 Math Test** – A six-step study program has been developed to help you make the best use of this book and prepare for your ATI TEAS 6 Math test. Here you'll find tips and

Integers and Absolute Value

- The absolute value of a number is its distance from zero, in either direction, on the number line. For example, the distance of 9 and -9 from zero on number line is 9.
- The absolute value of an integer is the numerical value without its sign. (negative or positive)
- The vertical bar is used for absolute value as in $|x|$.
- The absolute value of a number is never negative; because it only shows, "how far the number is from zero".

Examples:

Example 1. Calculate. $|14-2|\times 5=$

Solution: First, solve $|14-2|$, $\rightarrow |14-2|=|12|$, the absolute value of 12 is 12, $|12|=12$, Then: $12\times 5=60$

Example 2. Solve. $\frac{|-24|}{4}\times|5-7|=$

Solution: First, find $|-24|\rightarrow$ the absolute value of -24 is 24. Then: $|-24|=24$, $\frac{24}{4}\times|5-7|=$

Now, calculate $|5-7|$, $\rightarrow |5-7|=|-2|$, the absolute value of -2 is 2. $|-2|=2$ Then: $\frac{24}{4}\times 2=6\times 2=12$

Example 3. Solve. $|8-2|\times\frac{|-4\times 7|}{2}=$

Solution: First, calculate $|8-2|$,$\rightarrow |8-2|=|6|$, the absolute value of 6 is 6, $|6|=6$. Then: $6\times\frac{|-4\times 7|}{2}$

Now calculate $|-4\times 7|$, $\rightarrow |-4\times 7|=|-28|$, the absolute value of -28 is 28, $|-28|=28$, Then: $6\times\frac{28}{2}=6\times 14=84$



Chapter 3: Practices

Find each sum or difference.

1) $-9 + 16 =$
2) $-18 - 6 =$
3) $-24 + 10 =$
4) $30 + (-5) =$
5) $15 + (-3) =$
6) $(-13) + (-4) =$
7) $25 + (3 - 10) =$
8) $12 - (-6 + 9) =$
9) $5 - (-2 + 7) =$
10) $(-11) + (-5 + 6) =$
11) $(-3) + (9 - 16) =$
12) $(-8) - (13 + 4) =$
13) $(-7 + 9) - 39 =$
14) $(-30 + 6) - 14 =$
15) $(-5 + 9) + (-3 + 7) =$
16) $(8 - 19) - (-4 + 12) =$
17) $(-9 + 2) - (6 - 7) =$
18) $(-12 - 5) - (-4 - 14) =$

Solve.

19) $3 \times (-6) =$
20) $(-32) \div 4 =$
21) $(-5) \times 4 =$
22) $(25) \div (-5) =$
23) $(-72) \div 8 =$
24) $(-2) \times (-6) \times 5 =$
25) $(-2) \times 3 \times (-7) =$
26) $(-1) \times (-3) \times (-5) =$
27) $(-2) \times (-3) \times (-6) =$
28) $(-12 + 3) \times (-5) =$
29) $(-3 + 4) \times (-11) =$
30) $(-9) \times (6 - 5) =$
31) $(-3 - 7) \times (-6) =$
32) $(-7 + 3) \times (-9 + 6) =$
33) $(-15) \div (-17 + 12) =$
34) $(-3 - 2) \times (-9 + 7) =$
35) $(-15 + 31) \div (-2) =$
36) $(-64) \div (-16 + 8) =$

Evaluate each expression.

37) $3 + (2 \times 5) =$

38) $(5 \times 4) - 7 =$

39) $(-9 \times 2) + 6 =$

40) $(7 \times 3) - (-5) =$

41) $(-8) + (2 \times 7) =$

42) $(9 - 6) + (3 \times 4) =$

43) $(-19 + 5) + (6 \times 2) =$

44) $(32 \div 4) + (1 - 13) =$

45) $(-36 \div 6) - (12 + 3) =$

46) $(-16 + 5) - (54 \div 9) =$

47) $(-20 + 4) - (35 \div 5) =$

48) $(42 \div 7) + (2 \times 3) =$

49) $(28 \div 4) + (2 \times 6) =$

50) $2[(3 \times 3) - (4 \times 5)] =$

51) $3[(2 \times 8) + (4 \times 3)] =$

52) $2[(9 \times 3) - (6 \times 4)] =$

53) $4[(4 \times 8) \div (4 \times 4)] =$

54) $-5[(10 \times 8) \div (5 \times 8)] =$

Find the answers.

55) $|-5| + |7 - 10| =$

56) $|-4 + 6| + |-2| =$

57) $|-9| + |1 - 9| =$

58) $|-7| - |8 - 12| =$

59) $|9 - 11| + |8 - 15| =$

60) $|-7 + 10| - |-8 + 3| =$

61) $|-12 + 6| - |3 - 9| =$

62) $5 + |2 - 6| + |3 - 4| =$

63) $-4 + |2 - 6| + |1 - 9| =$

64) $\frac{|-42|}{7} \times \frac{|-64|}{8} =$

65) $\frac{|-100|}{10} \times \frac{|-36|}{6} =$

66) $|4 \times (-2)| \times \frac{|-27|}{3} =$

67) $|-3 \times 2| \times \frac{|-40|}{8} =$

68) $\frac{|-54|}{6} - |-3 \times 7| =$

69) $\frac{|-72|}{8} + |-7 \times 5| =$

70) $\frac{|-121|}{11} + |-6 \times 4| =$

71) $\frac{|(-6)\times(-3)|}{9} \times \frac{|2\times(-20)|}{5} =$

72) $\frac{|(-3)\times(-8)|}{6} \times \frac{|9\times(-4)|}{12} =$

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Chapter 3: Answers

1) 7
2) −24
3) −14
4) 25
5) 12
6) −17
7) 18
8) 9
9) 0
10)−10
11)−10
12)−25
13)−37
14)−38
15)8
16)−19
17)−6
18)1
19)−18
20)−8
21)−20
22)−5
23)−9
24)60
25)42
26)−15
27)−36
28)45
29)−11
30)−9
31)60
32)12
33)3
34)10
35)−8
36)8
37)13
38)13
39)−12
40)26
41)6
42)15
43)−2
44)−4
45)−21
46)−17
47)−23
48)12
49)19
50)−22
51)84
52)6
53)8
54)−10
55)8
56)4
57)17
58)3
59)9
60)−2
61)0
62)10
63)8
64)48
65)60
66)72
67)30
68)−12
69)44
70)35
71)16
72)12

CHAPTER

4 Ratios and Proportions

Math topics that you'll learn in this chapter:



- ☑ Simplifying Ratios
- ☑ Proportional Ratios
- ☑ Similarity and Ratios

Simplifying Ratios

- Ratios are used to make comparisons between two numbers.
- Ratios can be written as a fraction, using the word "to", or with a colon. Example: $\frac{3}{4}$ or "3 to 4" or 3:4
- You can calculate equivalent ratios by multiplying or dividing both sides of the ratio by the same number.

Examples:

Example 1. Simplify. $8:2 =$

Solution: Both numbers 8 and 2 are divisible by $2 \Rightarrow 8 \div 2 = 4$,
$4 \div 2 = 2$, Then: $8:2 = 4:1$

Example 2. Simplify. $\frac{9}{33} =$

Solution: Both numbers 9 and 33 are divisible by $3 \Rightarrow 33 \div 3 = 11$, $9 \div 3 = 3$, Then: $\frac{9}{33} = \frac{3}{11}$

Example 3. There are 24 students in a class and 10 are girls. Find the ratio of girls to boys in that class.

Solution: Subtract 10 from 24 to find the number of boys in the class.
$24 - 10 = 14$. There are 14 boys in the class. So, the ratio of girls to boys is 10:14.
Now, simplify this ratio. Both 14 and 10 are divisible by 2.
Then: $14 \div 2 = 7$, and $10 \div 2 = 5$. In the simplest form, this ratio is 5:7

Example 4. A recipe calls for butter and sugar in the ratio 3:4. If you're using 9 cups of butter, how many cups of sugar should you use?

Solution: Since you use 9 cups of butter, or 3 times as much, you need to multiply the amount of sugar by 3. Then: $4 \times 3 = 12$. So, you need to use 12 cups of sugar. You can solve this using equivalent fractions: $\frac{3}{4} = \frac{9}{12}$

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