Evaluating One Variable

Name: _____	Date: _____	Score: _____ / 18

Quick Review and Helpful Hints

To evaluate an expression, *substitute* the given number in place of the variable, then follow the order of operations (PEMDAS): parentheses, exponents, multiply and divide left to right, then add and subtract left to right. Put the substituted value in parentheses – this matters most when the value is negative.

▷ **Example:** Evaluate $3x + 5$ when $x = 4$. **Work:** Substitute 4 for x: $3(4) + 5$. Following order of operations, multiply first: $12 + 5$. Then add. ★ **Answer:** 17

Practice Problems

Evaluate each expression for the given value of the variable.

1. $x + 7$, when $x = 5$ _____

2. $2x$, when $x = 9$ _____

3. $3x - 4$, when $x = 6$ _____

4. x^2, when $x = 5$ _____

5. $5x + 1$, when $x = 3$ _____

6. $\frac{x}{2} + 6$, when $x = 10$ _____

7. $4x - 7$, when $x = 2$ _____

8. $x^2 + 2x$, when $x = 4$ _____

9. $10 - 2x$, when $x = 3$ _____

10. $2x + 8$, when $x = -3$ _____

11. $-x + 5$, when $x = 7$ _____

12. $x^2 - 1$, when $x = -4$ _____

13. $6x$, when $x = 0.5$ _____

14. $3(x + 2)$, when $x = 5$ _____

Word Problems

15. A taxi charges $\$3$ plus $\$2$ per mile, modeled by $2m + 3$. Find the cost for a $m = 8$ mile trip. _____

16. The area of a square is s^2. Find the area when the side $s = 9$ cm. _____

17. A phone plan costs $25 + 0.10t$ dollars for t texts. Find the cost when $t = 40$. _____

18. The expression $60 - 5h$ gives the liters of water left in a tank after h hours. How much is left after $h = 7$ hours? _____

Answer Keys

1. $\boxed{12}$	**7.** $\boxed{1}$	**13.** $\boxed{3}$
2. $\boxed{18}$	**8.** $\boxed{24}$	**14.** $\boxed{21}$
3. $\boxed{14}$	**9.** $\boxed{4}$	**15.** $\boxed{\$19}$
4. $\boxed{25}$	**10.** $\boxed{2}$	**16.** $\boxed{81\ \text{cm}^2}$
5. $\boxed{16}$	**11.** $\boxed{-2}$	**17.** $\boxed{\$29}$
6. $\boxed{11}$	**12.** $\boxed{15}$	**18.** $\boxed{25\ \text{liters}}$

Step-by-Step Explanations

1. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $5 + 7 = 12$. So the final answer is 12.

2. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $2(9) = 18$. So the final answer is 18.

3. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $3(6) - 4 = 18 - 4 = 14$. So the final answer is 14.

4. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $5^2 = 25$. So the final answer is 25.

5. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $5(3) + 1 = 15 + 1 = 16$. So the final answer is 16.

6. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $\frac{10}{2} + 6 = 5 + 6 = 11$. So the final answer is 11.

7. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $4(2) - 7 = 8 - 7 = 1$. So the final answer is 1.

8. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $4^2 + 2(4) = 16 + 8 = 24$. So the final answer is 24.

9. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $10 - 2(3) = 10 - 6 = 4$. So the final answer is 4.

10. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $2(-3) + 8 = -6 + 8 = 2$. So the final answer is 2.

11. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $-(7) + 5 = -2$. So the final answer is -2.

12. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $(-4)^2 - 1 = 16 - 1 = 15$. So the final answer is 15.

13. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $6(0.5) = 3$. So the final answer is 3.

14. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $3(5 + 2) = 3(7) = 21$. So the final answer is 21.

15. Step by step: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $2(8) + 3 = 16 + 3 = \$19$. So the final answer is $\$19$.

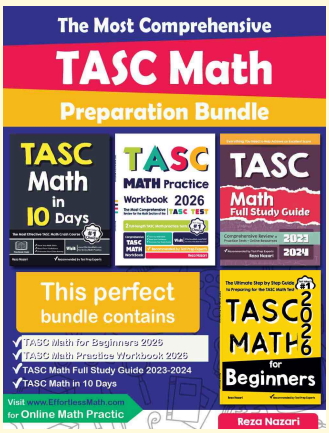
16. Take it one move at a time: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $s^2 = 9^2 = 81$ square cm. So the final answer is $81\ \text{cm}^2$.

17. Start by naming the process: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $25 + 0.10(40) = 25 + 4 = \$29$. So the final answer is $\$29$.

18. A good way to think about this is: Read what the problem is asking, choose the matching rule, write the setup, and then simplify one step at a time. The setup/work is $60 - 5(7) = 60 - 35 = 25$ liters. So the final answer is 25 liters.

Keep Building TASC Math Skills

Recommended Effortless Math resources



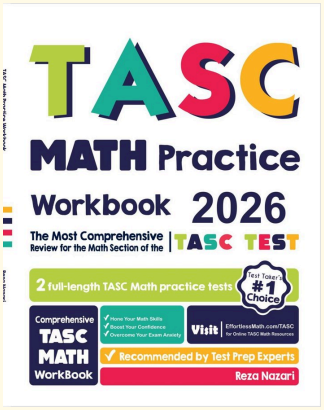
The Most Comprehensive TASC Math Preparation Bundle

Use the complete TASC Math resource for review, worked examples, extra practice, and test-style questions after each worksheet.

Scan Me

Download Instantly

STUDENT FAVORITE - TASC Math Practice Workbook 2026



Step-by-step lessons, topic practice, and full review support for students who want a calm path through TASC Math preparation.

A strong companion for self-study, tutoring, homework, and targeted review.

PDF Edition

Scan Me

Download Instantly

For more TASC Math prep, visit EffortlessMath.com/TASC