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By

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Description

Comprehensive Common Core Grade 8 Math Practice Book 2020 - 2021, which reflects the 2020 - 2021 test guidelines, is a precious learning resource for Common Core test-takers who need extra practice in math to raise their Common Core Math scores. Upon completion of this exercise book, you will have a solid foundation and sufficient practice to ace the Common Core Math test. **This comprehensive practice book is your ticket to scoring higher on Common Core Grade 8 Math.**

The updated version of this unique practice workbook represents extensive exercises, math problems, sample Common Core questions, and quizzes with answers and detailed solutions to help you hone your math skills, overcome your exam anxiety, boost your confidence—and do your best to defeat the Common Core exam on test day.

Comprehensive Common Core Grade 8 Math Practice Book 2020 – 2021 includes many exciting and unique features to help you improve your test scores, including:

- ✓ Content 100% aligned with the 2020 Common Core® test
- ✓ Complete coverage of all Common Core Math concepts and topics which you will be tested
- ✓ Over 2,500 additional Common Core math practice questions in both multiple-choice and grid-in formats with answers grouped by topic, so you can focus on your weak areas
- ✓ Abundant Math skill-building exercises to help test-takers approach different question types that might be unfamiliar to them
- ✓ 2 full-length practice tests (featuring new question types) with detailed answers

This Common Core Math practice book and other Effortless Math Education books are used by thousands of students each year to help them review core content areas, brush-up in math, discover their strengths and weaknesses, and achieve their best scores on the Common Core test.

Simplifying Variable Expressions

Simplify and write the answer.

1) $3x + 5 + 2x =$

2) $7x + 3 - 3x =$

3) $-2 - x^2 - 6x^2 =$

4) $(-6)(8x - 4) =$

5) $3 + 10x^2 + 2x =$

6) $8x^2 + 6x + 7x^2 =$

7) $2x^2 - 5x - 7x =$

8) $x - 3 + 5 - 3x =$

9) $2 - 3x + 12 - 2x =$

10) $5x^2 - 12x^2 + 8x =$

11) $2x^2 + 6x + 3x^2 =$

12) $2x^2 - 2x - x =$

13) $2x^2 - (-8x + 6) = 2$

14) $4x + 6(2 - 5x) =$

15) $10x + 8(10x - 6) =$

16) $9\,(-2x - 6) - 5 =$

17) $32x - 4 + 23 + 2x =$

18) $8x - 12x - x^2 + 13 =$

19) $(-6)(8x - 4) + 10x =$

20) $14x - 5(5 - 8x) =$

21) $23x + 4(9x + 3) + 12 =$

22) $3(-7x + 5) + 20x =$

23) $12x - 3x(x + 9) =$

24) $7x + 5x(3 - 3x) =$

25) $5x(-8x + 12) + 14x =$

26) $40x + 12 + 2x^2 =$

27) $5x(x - 3) - 10 =$

28) $8x - 7 + 8x + 2x^2 =$

29) $7x - 3x^2 - 5x^2 - 3 =$

30) $4 + x^2 - 6x^2 - 12x =$

31) $12x + 8x^2 + 2x + 20 =$

32) $23 + 15x^2 + 8x - 4x^2 =$

Simplifying Polynomial Expressions

Simplify and write the answer.

1) $(2x^3 + 5x^2) - (12x + 2x^2) =$ _____

2) $(-x^5 + 2x^3) - (3x^3 + 6x^2) =$ _____

3) $(12x^4 + 4x^2) - (2x^2 - 6x^4) =$ _____

4) $4x - 3x^2 - 2(6x^2 + 6x^3) =$ _____

5) $(2x^3 - 3) + 3(2x^2 - 3x^3) =$ _____

6) $4(4x^3 - 2x) - (3x^3 - 2x^4) =$ _____

7) $2(4x - 3x^3) - 3(3x^3 + 4x^2) =$ _____

8) $(2x^2 - 2x) - (2x^3 + 5x^2) =$ _____

9) $2x^3 - (4x^4 + 2x) + x^2 =$ _____

10) $x^4 - 9(x^2 + x) - 5x =$ _____

11) $(-2x^2 - x^4) + (4x^4 - x^2) =$ _____

12) $4x^2 - 5x^3 + 15x^4 - 12x^3 =$ _____

13) $2x^2 - 5x^4 + 14x^4 - 11x^3 =$ _____

14) $2x^2 + 5x^3 - 7x^2 + 12x =$ _____

15) $2x^4 - 5x^5 + 8x^4 - 8x^2 =$ _____

16) $5x^3 + 17x - 5x^2 - 2x^3 =$ _____

Evaluating One Variable

Evaluate each expression using the value given.

1) $x = 3 \Rightarrow 6x - 9 =$

2) $x = 2 \Rightarrow 7x - 10 =$

3) $x = 1 \Rightarrow 5x + 2 =$

4) $x = 2 \Rightarrow 3x + 9 =$

5) $x = 4 \Rightarrow 4x - 8 =$

6) $x = 2 \Rightarrow 5x - 2x + 10 =$

7) $x = 3 \Rightarrow 2x - x - 6 =$

8) $x = 4 \Rightarrow 6x - 3x + 4 =$

9) $x = -2 \Rightarrow 4x - 6x - 5 =$

10) $x = -1 \Rightarrow 3x - 5x + 11 =$

11) $x = 1 \Rightarrow x - 7x + 12 =$

12) $x = 2 \Rightarrow 2(-3x + 4) =$

13) $x = 3 \Rightarrow 4(-5x - 2) =$

14) $x = 2 \Rightarrow 5(-2x - 4) =$

15) $x = -2 \Rightarrow 3(-4x - 5) =$

16) $x = 3 \Rightarrow 8x + 5 =$

17) $x = -3 \Rightarrow 12x + 9 =$

18) $x = -1 \Rightarrow 9x - 8 =$

19) $x = 2 \Rightarrow 16x - 10 =$

20) $x = 1 \Rightarrow 4x + 3 =$

21) $x = 5 \Rightarrow 7x - 2 =$

22) $x = 7 \Rightarrow 28 - x =$

23) $x = 3 \Rightarrow 5x - 10 =$

24) $x = 12 \Rightarrow 40 - 2x =$

25) $x = 2 \Rightarrow 11x - 2 =$

26) $x = 3 \Rightarrow 2x - x + 10 =$

Evaluating Two Variables

Evaluate each expression using the values given.

1) $2x + 3y, x = 2, y = 3$

2) $3x + 4y, x = -1, y = -2$

3) $x + 6y, x = 3, y = 1$

4) $2a - (15 - b), a = 2, b = 3$

5) $4a - (6 - 3b), a = 1, b = 4$

6) $a - (8 - 2b), a = 2, b = 5$

7) $3z + 21 + 5k, z = 4, k = 1$

8) $-7a + 4b, a = 6, b = 3$

9) $-4a + 3b, a = 2, b = 4$

10) $-6a + 6b, a = 4, b = 3$

11) $-8a + 2b, a = 4, b = 6$

12) $4x + 6y, x = 6, y = 3$

13) $2x + 9y, x = 8, y = 1$

14) $x - 7y, x = 9, y = 4$

15) $5x - 4y, x = 6, y = 3$

16) $2z + 14 + 8k, z = 4, k = 1$

17) $6x + 3y, x = 3, y = 8$

18) $5a - 6b, a = -3, b = -1$

19) $8a + 4b, a = -4, b = 3$

20) $-2a - b, a = 4, b = 9$

21) $-7a + 3b, a = 4, b = 3$

22) $-5a + 9b, a = 7, b = 1$

The Distributive Property

Use the distributive property to simply each expression.

1) $(-3)(12x+3) =$

2) $(-4x+5)(-6) =$

3) $13(-4x+2) =$

4) $7(6-3x) =$

5) $(6-5x)(-4) =$

6) $9(8-2x) =$

7) $(-4x+6)5 =$

8) $(-2x+7)(-8) =$

9) $8(-4x+7) =$

10) $(-9x+5)(-3) =$

11) $8(-x+9) =$

12) $7(2-6x) =$

13) $(-12x+4)(-3) =$

14) $(-6)(-10x+6) =$

15) $(-5)(5-11x) =$

16) $9(4-8x) =$

17) $(-6x+2)7 =$

18) $(-9)(1-12x) =$

19) $(-3)(4-6x) =$

20) $(2-8x)(-2) =$

21) $20(2-x) =$

22) $12(-4x+3) =$

23) $15(2-3x) =$

24) $(-4x+5)2 =$

25) $(-11x+8)(-2) =$

26) $14(5-8x) =$

Answers – Chapter 6

Simplifying Variable Expressions

1) $5x + 5$
2) $4x + 3$
3) $-7x^2 - 2$
4) $-48x + 24$
5) $10x^2 + 2x + 3$
6) $15x^2 + 6x$
7) $2x^2 - 12x$
8) $-2x + 2$
9) $-5x + 14$
10) $-7x^2 + 8x$
11) $5x^2 + 6x$
12) $2x^2 - 3x$
13) $2x^2 + 8x - 6$
14) $-26x + 12$
15) $90x - 48$
16) $-18x - 59$
17) $34x + 19$
18) $-x^2 - 4x + 13$
19) $-38x + 24$
20) $54x - 25$
21) $59x + 24$
22) $-x + 15$
23) $-3x^2 - 15x$
24) $-15x^2 + 22x$
25) $-40x^2 + 74x$
26) $2x^2 + 40x + 12$
27) $5x^2 - 15x - 10$
28) $2x^2 + 16x - 7$
29) $-8x^2 + 7x - 3$
30) $-5x^2 - 12x + 4$
31) $8x^2 + 14x + 20$
32) $11x^2 + 8x + 23$

Simplifying Polynomial Expressions

1) $2x^3 + 3x^2 - 12x$
2) $-x^5 - x^3 - 6x^2$
3) $18x^4 + 2x^2$
4) $-12x^3 - 15x^2 + 4x$
5) $-7x^3 + 6x^2 - 3$
6) $2x^4 + 13x^3 - 8x$
7) $-15x^3 - 12x^2 + 8x$
8) $-2x^3 - 3x^2 - 2x$
9) $-4x^4 + 2x^3 + x^2 - 2x$
10) $x^4 - 9x^2 - 14x$
11) $3x^4 - 3x^2$
12) $15x^4 - 17x^3 + 4x^2$
13) $9x^4 - 11x^3 + 2x^2$
14) $5x^3 - 5x^2 + 12x$
15) $-5x^5 + 10x^4 - 8x^2$
16) $3x^3 - 5x^2 + 17x$

Evaluating One Variable

1) 9
2) 4
3) 7
4) 15
5) 8
6) 16
7) -3
8) 16
9) -1
10) 13
11) 6
12) -4
13) -68
14) -40
15) 9
16) 29
17) -27
18) -17
19) 22
20) 7
21) 33