Final Review. (Answers)

Write the definition of each word.

1. operation — See glossary. Answers may vary.

2. integer

3. sum

4. difference

Write the three rules for adding integers.

1. When adding ***two positive integers*** you **add** the numbers,
and your answer is **positive**.

2. When adding ***two negative integers*** you **add** the numbers,
and your answer is **negative**.

3. When adding ***a negative and a positive integer*** you
subtract the numbers(find the difference),
and your answer has the **sign of the larger number**.

Write the three rules for multiplying integers.

1. A positive integer times a positive integer equals a positive integer.

2. A positive integer times a negative integer equals a negative integer.

3. A negative integer times a negative integer equals a positive integer.

Write the three rules for dividing integers.

1. A positive integer divided by a positive integer equals a positive integer.

2. A positive integer divided by a negative integer equals a negative integer.
And a negative integer divided by a positive integer is a negative integer.

3. A negative integer divided by a negative integer equals a positive integer.

Solve.

1. $12 + 3 = 15$
2. $15 - 4 = 11$
3. $3 - 8 = -5$
4. $-5 + 10 = 5$
5. $-3 - 5 = -8$
6. $(-4) + 8 = 4$
7. $-6 + 6 = 0$
8. $6 + -8 = -2$
9. $4 - -6 = 10$
10. $9 + -7 = 2$
11. $-1 - -4 = 3$
12. $-30 + 70 = 40$
13. $-45 - 57 = -102$
14. $80 - -35 = 115$
15. $11 + -87 = -76$
16. $(4)(-7) = -28$
17. $(0)(17) = 0$
18. $1 \times 88 = 88$
19. $(-5)(-7) = 35$

20. $45 \div (-5) =$ -9

21. $0 \div 4 =$ 0

22. $\frac{-18}{-9} =$ 2

23. $(-2)(-2)(-2)(-2) =$ 16

24. $-10 \div 2 =$ -5

25. $-9 \times 1 =$ -9

26. $8 \times \frac{1}{8} =$ 1

27. $5^2 =$ 25

28. $-3 \times (-2) =$ 6

29. $\frac{6}{-3} =$ -2

30. $-\frac{-4}{2} =$ 2

31. $(-2)^4 =$ 16

32. $(-2)^3 =$ -8

33. $-\frac{-15}{-5} =$ -3

34. $64 + 0 =$ 64

35. $\frac{0}{3} =$ 0

Chapter 2 – Adding and Subtracting Integers (Answers)

Solve.

1. -5 + 3 = -2	13. -12 + 7 = -5	25. -6 + 1 = -5
2. 8 – 3 = 5	14. +9 - 2 = 7	26. 5 – (4) = 1
3. -3 – 9 = -12	15. (-3) – 1 = -4	27. (-6) – 3 = -9
4. 7 – -2 = 9	16. 5 - - 2 = 7	28. 9 - -3 = 12
5. (-8) + 8 = 0	17. -8 + (8) = 0	29. -25 + 25 = 0
6. 4 + 4 = 8	18. 3 + 3 = 6	30. (+34) + (54) = 88
7. -2 + (8) = 6	19. (-1) + 5 = 4	31. -12 +17 = 5
8. -4 – -2 = -2	20. -13 - -4 = -9	32. -39 - -42 = 3
9. 11 – 11 = 0	21. 14 – 14 = 0	33. 43 – 63 = -20
10. (-2) + (-6) = -8	22. -1 + -2 = -3	34. -31 + (-54) = -85
11. 3 – 6 = -3	23. (4) – (5) = -1	35. 88 – 99 = -11
12. 9 + (-1) = 8	24. 10 + (-3) = 7	36. 69 + (-27) = 42

Chapter 3 – Multiplying Integers (Answers)

Solve.

1. $3(-5) = -15$
2. $(-4)(-4) = 16$
3. $5(-1) = -5$
4. $6 \times 6 = 36$
5. $(-4)9 = -36$
6. $(-7)\times 2 = -14$
7. $(-5)(-5) = 25$
8. $(-3)\times(-1) = 3$
9. $-9 \times 5 = -45$
10. $4 \times (-2) = -8$
11. $(-3)(2)(4) = -24$
12. $(-1)(-1)(-1)(-1) = 1$
13. $(-2)(-4)(-2) = -16$
14. $7 \times (-3) \times (-2) = 42$
15. $(-4)(5)(-1) = 20$
16. $5(-8)(-1)(-1) = -40$

Chapter 3 Dividing Integers (Answers)

Solve.

1. $48 \div (-8) = -6$

2. $(-4) \div (-4) = 1$

3. $9 \div (-1) = -9$

4. $8 \div 8 = 1$

5. $(-64) \div 8 = -8$

6. $\frac{(-12)}{(-2)} = 6$

7. $\frac{-21}{3} = -7$

8. $\frac{24}{-6} = -4$

9. $\frac{8}{2} = 4$

10. $-\frac{-12}{-2} = -6$

11. $-\frac{8}{-2} = 4$

12. $+\frac{(-40)}{8} = -5$

13. $-\frac{(-25)}{+5} = 5$

14. $-\frac{(-36)}{-4} = -9$

Chapter 3 – Integers with Exponents (Answers)

Simplify.

1. $(-1)^5 =$ -1

2. $(-7)^2 =$ 49

3. $(-1)^6 =$ 1

4. $(-2)^5 =$ -32

5. $(4)^3 =$ 64

6. $(-9)^2 =$ 81

7. $(-1)^4 =$ 1

8. $(-5)^3 =$ -125

Chapter 3 – Integers. Multiplication, Division and Exponents. (Answers)
Solve.

1. $48 \div (-8) = -6$	11. $11 \times (-11) = -121$
2. $(-6)(-6) = 36$	12. $\frac{(-35)}{(-7)} = 5$
3. $7(-2) = -14$	13. $-3 \times 8 = -24$
4. $(-21) \div (-3) = 7$	14. $+ \frac{-55}{-11} = 5$
5. $(-3)^4 = 81$	15. $(3)(-5)(-1) = 15$
6. $\frac{-8}{2} = -4$	16. $9 \div (-3) = -3$
7. $(-1)(-1)(-1) = -1$	17. $\frac{49}{-7} = -7$
8. $(-2)^3 = -8$	18. $- \frac{+15}{-3} = 5$
9. $- \frac{-28}{7} = 4$	19. $(-9)^2 = 81$
10. $- \frac{(-24)}{(-3)} = -8$	20. $-6 \times 5 = -30$

Chapter 3 – Integers. Addition, subtraction, multiplication, division and exponents. (Answers)

Solve

1. $8 - 12 = -4$	12. $\frac{(-24)}{-3} = 8$
2. $10 - -2 = 12$	13. $(-3)(-3)(-2)(-1) = 18$
3. $(9)(-2) = -18$	14. $+4 - +7 = -3$
4. $6 \div (-2) = -3$	15. $13 + (-4) = 9$
5. $14 - 3 = 11$	16. $(-8) \times (-1) = 8$
6. $(-2) + (-7) = -9$	17. $(-1)^7 = -1$
7. $-4 \times 4 = -16$	18. $-4 \times (-2) = 8$
8. $\_\ \frac{-16}{2} = 8$	19. $\_\ \frac{8}{-2} = 4$
9. $-2 - (-2) = 0$	20. $(-6)^2 = 36$
10. $(-2)^3 = -8$	21. $-3 + 15 = 12$
11. $\_\ \frac{(-28)}{(-4)} = -7$	22. $-9 + 1 = -8$