Final Review (Answers)

Solve.

1. $4^2 =$ 16

2. $1^5 =$ 1

3. $9^0 =$ 1

4. $\sqrt{25}$ =   5

5. $\sqrt{49}$ =   7

6. $\sqrt[3]{27}$ =   3

7. $\sqrt[3]{8}$ =   2

8. $\sqrt[4]{16}$ =   2

9. $(4+1)^2$ =   25

10. 5^{-2} =   1/25

11. 2^{-4} =   1/16

12. 8^{-2} =   1/64

Change to scientific notation.

13. 377,000 = $3.77 \text{x} 10^5$

14. 2,491   = $2.491 \text{x} 10^3$

Change to a regular number.

15. 3.3×10^5 =   330,000

16. 7.18×10^{-6} =   .00000718

Find the average.

17.   3, 5, 12, and 16   Avg = 9

Round to the ten's place.

18. 441   440

19. 8128   8130

Round to the tenths place

20. 2.35   2.4

21. 50.81   50.8

Round to the hundred's place.

22. 441   400

23. 8178   8200

Round to the hundredths place

24. 3.3552   3.36

25. 60.8138   60.81

Solve or Answer.

26. What is the average of 10, 15, 18, 27, and 35?   21

27. Given the data: 7, 8, 8, 10, 12, 12, 12, 18

What is the mean?   10.875   median?   11

mode?   12   and range?   11   .

28. Name 6 types of graphs.

_____
_____
_____   See pages 90 and 91.
_____
_____
_____

29. What is the definition of probability?   How likely that an event will occur.

30. What is the definition of odds?   A ratio of successes to failures.

31. When rolling one die, what is the probability of getting a 4?   1/6

What are the odds of getting a 4?   1:5

32. When selecting from a bag of 4 red blocks and 9 blue blocks, what is the probability of getting a blue block?   9/13

What are the odds of getting a blue block?   9:4

33. When drawing one card from a deck of cards, what is the probability of getting a club?   1/4

What are the odds of getting a club?   1:3

Chapter 2 (Answers)

1. $2^4 =$ 16   6. $1^4 = 1$
2. $5^1 =$ 5   7. $4^2 = 16$
3. $10^2 =$ 100   8. $2^5 = 32$
4. $3^4 =$ 81   9. $5^3 = 125$
5. $5^2 =$ 25   10. $2^3 = 8$

Chapter 3 (Answers)

1. $4^0 =$ 1   6. $(6-5)^8$ =   1
2. $9^0 =$ 1   7. $(1+1+1)^4 =$ 81
3. $(2+1)^2 =$ 9   8. $3^0 =$ 1
4. $(3-1)^4 =$ 16   9. $(2+2)^1 =$ 4
5. $(8-5)^0 =$ 1   10. $(5-1)^0 =$ 1

Chapter 4 (Answers)

1. $\sqrt{9}$ 3   6. $\sqrt[3]{8}$ 2
2. $\sqrt{64}$ 8   7. $\sqrt[3]{27}$ 3
3. $\sqrt{100}$ 10   8. $\sqrt[4]{81}$ 3
4. $\sqrt{4}$ 2   9. $\sqrt[3]{1000}$ 10
5. $\sqrt{25}$ 5   10. $\sqrt{49}$ 7

Chapter 6 (Answers)

1. $2^{-2} =$ 1/4   6. $5^{-2} =$ 1/25
2. $4^{-3} =$ 1/64   7. $6^{-3} =$ 1/216
3. $10^{-1} =$ 1/10   8. $2^{-4} =$ 1/16
4. $3^{-2} =$ 1/9   9. $3^{-3} =$ 1/27
5. $1^{-5} =$ 1   10. $4^{-1} =$ 1/4

Chapter 7 (Answers)

Change to scientific notation.

1.	.0003	3×10^{-4}
2.	23,400	2.34×10^{4}
3.	.000062	6.2×10^{-5}
4.	1,200	1.2×10^{3}
5.	40,000	4×10^{4}

Change to regular notation.

6.	2.5×10^{2}	250
7.	6.8×10^{-3}	.0068
8.	9×10^{4}	90,000
9.	2×10^{-6}	.000002
10.	3.45×10^{5}	345,000

Chapter 8 (Answers)

Find the average.

1.	8, 10, 12	10
2.	1, 5, 9	5
3.	1, 5, 6, 12	6
4.	3, 4, 4, 7, 8, 10	6
5.	2, 8, 17	9
6.	12, 16	14
7.	10, 20	15
8.	10, 25, 46	27
9.	1, 2, 3, 4, 5	3
10.	50, 60	55

Chapter 9 (Answers)

Round to the nearest hundred.

1.	2,770	2800
2.	65,281	65,300
3.	460	500

Round to the nearest tenth.

4.	4.12	4.1
5.	14.95	15.0
6.	10.088	10.1

Round to the nearest hundredth.

7.	.431	.43
8.	.6923	.69
9.	4.395	4.4
10.	9.0432	9.04

Chapter 11 (Answers)

Solve the quick way.

1. $20 \times 100 =$ 2,000
2. $300 \times 4000 =$ 1,200,000
3. $10 \times 89 =$ 890
4. $\dfrac{450}{10} =$ 45

5. $\dfrac{34000}{1000} =$ 34

6. $\dfrac{6000}{18000} =$ 1/3

Solve using money facts.

7. $25 \times 4 =$ 100
8. $100 \div 4 =$ 25
9. $20 \times 5 =$ 100
10. $250 \times 25 =$ 6250

Solve using time facts.

11. $4 \times 15 =$ 60
12. $60 \div 3 =$ 20
13. $60 \div 4 =$ 15
14. $3 \times 20 =$ 60
15. $60 \div 5 =$ 12

Chapter 14 (Answers)

Find the average.

1.	8, 10, 12	10
2.	35, 45	40
3.	5, 7, 11, 17, 25	13
4.	1, 4, 5, 7, 9, 10	6
5.	100, 102, 108, 110	105

Chapter 15 (Answers)

Calculate the mean, median, mode, and range.

1.	1, 3, 3, 4, 6, 9, 11, 13
2.	5, 7, 7, 10, 10, 10, 12, 13, 17, 20, 22
3.	5, 10, 25, 30, 30, 35

Answers to 1 – 3

	Mean	Median	Mode	Range
1.	6.25	5	3	12
2.	12.09	10	10	17
3.	22.5	27 ½	30	30

Chapter 17 (Answers)

There is a bowl of 4 silver coins, 12 gold coins, and 7 copper coins. One coin is selected.

1.	What is the probability of selecting a silver coin?	4/23
2.	What is the probability of selecting a gold coin?	12/23
3.	What is the probability of selecting a copper coin?	7/23

There is a die.

4.	What is the probability of rolling a 5?	1/6
5.	What is the probability of rolling a 2 or 4?	1/3

There is a standard deck of cards. One card is picked.

6.	What is the probability of picking an 8?	1/13
7.	What is the probability of picking a four of hearts?	1/52
8.	What is the probability of picking a queen or jack?	2/13
9.	What is the probability of picking a black card?	½
10.	What is the probability of picking a face card?	3/13

Chapter 18 (Answers)

There is a bag of 3 purple beads, 6 blue and 8 white. One bead is selected.

1.	What is the probability of picking a blue bead?	6/17
2.	What are the odds of picking a blue bead?	6:11
3.	What is the probability of picking a purple or blue bead?	9/17
4.	What are the odds of picking a white bead?	8:9
5.	What are the odds of picking a purple or white bead?	11:6