

# Year-End Test 2

## Year-End Test 2

This test has 50 problems. This test should be combined with the score on Year-End Test 1 for a total of 100 points.

Concepts are continued on the next page.

Feel free to skip the starred problems if your students have not learned these concepts.

The following are the concepts reviewed on the test:

Q#	Lesson	Concept	TEKS Standard
1	130	Addition of integers	6.3C, 6.3D
2	130	Addition of integers	6.3C, 6.3D
3	143	Subtraction of integers	6.3C, 6.3D
4	★ 77	Square roots	8.2B
5	77	Exponents	6.2A, 6.7A
6	122	Multiplication: 3 digit x 3 digit	6.3C, 6.3D
7	52	Division involving decimals	6.3E
8	136	3-digit divisor into a 4-digit dividend	6.3C, 6.3D
9	81	Adding zeros to the right of the dividend	6.2A, 6.3C, 6.3D
10	2	Less than and greater than	6.2C
11	60	Sum of a circle's central angles	6.8A
12	56	Greatest common factors	6.3D
13	25	Right angles	6.8A, 7.5B
14	95	Places to the right of the thousandths	6.2A, 6.2B, 6.2C
15	3	Trial and error in equations	6.1A - G*
16	21	2-D figures: hexagon	5.5 (This is a TEKS concept from the previous year)
17	118	Division of fractions	6.3E
18	118	Division of fractions	6.3E
19	★ 77	Square roots	8.2B
20	84	Sequences: counting by varying amounts	6.2A
21	★ 60	Parts of a circle: radius and diameter	7.5B
22	61	Rounding to the nearest hundredth	6.2A
23	1	Number words less than one million	6.2A
24	123	Rounding fractions to whole numbers	6.2A, 6.2C
25	★ 125	Pi ( $\pi$ ) as a mixed number	7.5B, 7.8C, 7.9B

\*6.1A - G = Mathematical Processes (see introductory page i.5)

★ = This is an accelerated Excel Math concept that goes beyond TEKS for Grade 6.

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## Year-End Test 2 Concepts, continued

Q#	Lesson	Concept	TEKS Standard
26	91	Embedded parentheses	6.7A, 6.7B, 6.7C, 6.7D, 6.10A, 6.10B
27	50	Prime numbers	6.7A
28	★ 125	Circumference	7.5B
29	24	Expanded notation	6.3C, 6.3D
30	99	Ratios as lowest-terms fractions	6.1A - G,* 6.4B, 6.4C, 6.4G
31	86	Estimation to the nearest dollar	6.1A - G,* 6.2A
32	119	Number lines: mixed numbers	6.2C
33	64	Multiples and factors	6.3D
34	25	Acute angles	6.8A
35	★ 60	Parts of a circle: circumference	7.9B
36	126	Measurement conversion	6.4H
37	116	Percent of a whole number	6.3C, 6.3D, 6.3E
38	15	3-D figures: sphere	3.6A, 7.8A
39	★ 60	Parts of a circle: chord	7.5B
40	59	Volume of a rectangular prism	6.8C
41	★ 60	Parts of a circle: arc	7.5B
42	55	Averages	6.12B, 6.12C
43	65	Mode	6.12D
44	120	Averages involving fractions	6.1A - G*, 6.3C, 6.3D, 6.12B, 6.12C
45	69	Trial and error in word problems	6.1A - G*
46	97	Ratios written as a percent	6.4B, 6.4C, 6.4E
47	97	Ratios written as a decimal number	6.4B, 6.4C, 6.4E
48	65	Mean	6.12C
49	115	Equations that represent lines	6.11
50	100	Equations that create patterns	6.9A, 6.9B, 6.10A, 6.10B

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1  $-4 + -9 = -13$

2  $-12 + +7 = 5$

3  $8 - -5 = -3$

4  $\sqrt{81} = 9$

5  $3^4 = 81$

6  $\$1.97$   
 $\times 3.49$   
**\$687.53**

7  $2 \overline{) 3.3}$   
 $1.65$

8  $193 \overline{) 5983}$   
 $31$

9 Calculate a decimal answer.  $8 \overline{) 1.75}$   
 $1.4$

10 Select the correct symbol.  
 $-18 < 7$

11 What is the sum of the central angles of a circle?  
 $360^\circ$

12 This is a right angle.

13 A hexagon has 6 sides.  
 $\frac{2}{5} + \frac{2}{3} = \frac{3}{5}$

14 The square root of 9 is 3.

15 The radius of a circle is 6 feet.  
The diameter is 12 ft.

16 Round to the nearest hundredth.  
 $5.421 \underline{5.42}$

17 Round to the nearest whole number.  
 $4 \frac{5}{10} \underline{5}$

18  $D + (5 \times (34 - 19)) = (17 \times 3) + 40$   
 $D = 16$

19 What are the prime numbers that are greater than 30 and less than fifty?  
31, 37, 41, 43, 47

20 Write this number in expanded notation.  
 $102,054,680$   
 $(1 \times 100,000,000) +$   
 $(2 \times 1,000,000) + (5 \times 10,000) +$   
 $(4 \times 1,000) + (6 \times 100) + (8 \times 10)$

21 Carlo and three friends went out to dinner. Each person's meal cost \$10.71. Round to the nearest dollar and then estimate the cost of all of their dinners.  
\$44.00

11 What is the greatest common factor of 18 and 24?  
6

12  $R + R + R = 24$   
 $R = 8$

13  $6 \div \frac{1}{2} = 12$

14 Round to the nearest hundredth.  
 $(125, 120, 110, 95, 75, \underline{50}, \underline{20})$

15 What is the circumference of a circle with a radius of 20 centimeters? Use 3.14 for pi.  
125.6 cm

16 Jen bought 5 dozen donuts. Two dozen are glazed. If she picks a donut at random, what is the probability it will be a glazed one? Write the answer as a fraction in its lowest terms.  
 $\frac{2}{5}$

17 Carlo and three friends went out to dinner. Each person's meal cost \$10.71. Round to the nearest dollar and then estimate the cost of all of their dinners.  
\$44.00

18 Which point is  $-1 \frac{6}{8}$ ?  
c

Year-End Test 2

Excel Math

Name \_\_\_\_\_ Date \_\_\_\_\_

# \_\_\_\_\_

34 What numbers are multiples of 3 and factors of 24?  
3, 6, 12, 24

35  $2 \frac{1}{4}$  gal = 9 qt

36 Draw an acute angle. any angle less than  $90^\circ$

37 What is 2% of 350?  
7

38 A rectangular prism is 8 in long, 3 in tall and 11 in wide. What is its volume?  
264 cubic in

39 Two boys weigh 70 and 76 kilograms. What is their average weight?  
73 kg

40 There were 3 and 5 point questions on a quiz. Tim scored 45 points, answering 11 questions correctly. How many 3 point questions did he get right?  
5 questions

41 Which choice is the definition of the statistical mean?  
select the value in the set that occurs most often

42 Add all the values in a set and divide that total by the number of items in the set  
put all the values of a set in order and select the value in the middle

43 Which equation represents the line shown on the graph?  
 $y = 6 - x$   
 $y = 6 - 2x$   
 $y = 6 - \frac{1}{2}x$

44 Andres has 100 grapes. Seventy-one of them are green grapes. If he chooses a grape at random, what is the probability that it will be green? Write the probability as a percent.  
71%

45 Wade's class has 35 students. Seven are absent today. If he chooses a student at random from the list of names, what is the probability that it will be an absent student? Write the probability as a decimal.  
.2

46 Danny's photo album has 10 pages. The pages have 3, 4, 2, 7, 4, 3, 0, 2, 4 and 5 photos. What is the mode number of photos per page?  
4 photos

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51 Wade's class has 35 students. Seven are absent today. If he chooses a student at random from the list of names, what is the probability that it will be an absent student? Write the probability as a decimal.  
.2

52 Four students weigh a total of 79 kilograms. What is their average weight? Write any remainder as a fraction.  
 $19 \frac{3}{4}$  kg

53 Draw a chord on the circle below.

54 Draw an acute angle. any angle less than  $90^\circ$

55 What is 2% of 350?  
7

56 A rectangular prism is 8 in long, 3 in tall and 11 in wide. What is its volume?  
264 cubic in

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