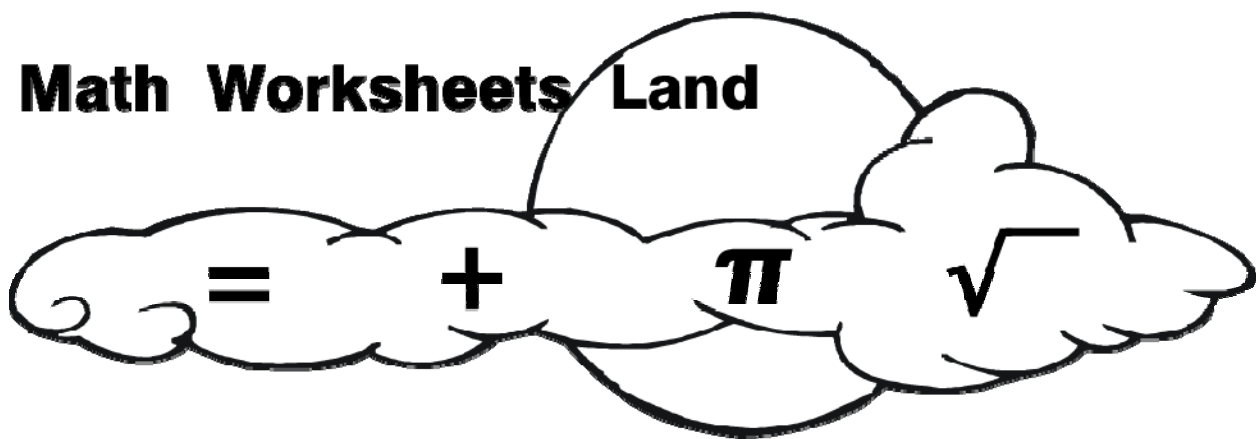


Grade 7 Core Curriculum Math Test

Full Length Grade 7 Common Core Aligned Practice Test

Math Worksheets Land



All common core standards are covered over the questions on this exam.

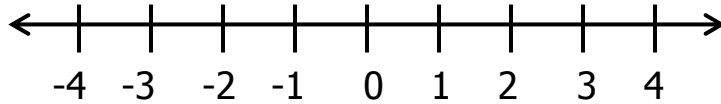
Recommended Test Time: 70 minutes

Name: _____

Date: _____

1. Subtract. Use the number line to help you.

$$-3 - (-6) =$$



a) 3

b) -3

c) 9

d) -9

2. Archie used $\frac{1}{3}$ of a jar of tomato sauce to make $\frac{3}{8}$ of a pizza. How many jars of tomato sauce will Archie need to make one whole pizza?

a) 1 jar

b) $\frac{8}{9}$ of a jar

c) $\frac{9}{8}$ jars

d) $\frac{8}{3}$ jars

Name: _____

Date: _____

3. Find the product.

$$- |-9| \times |7| =$$

- a) 16
- b) -16
- c) 63
- d) -63

4. What is the reciprocal of $4\frac{3}{7}$?

- a) $\frac{7}{31}$
- b) $\frac{31}{7}$
- c) $\frac{12}{7}$
- d) $\frac{7}{12}$

Name: _____

Date: _____

5. Julie owns a bakery. The following tables show how many loaves of bread Julie bakes over several hourly intervals. Which table represents a proportional relationship?

a)

Loaves of Bread	Hours
12	3
24	6
32	8
36	9

b)

Loaves of Bread	Hours
12	3
24	7
32	8
36	10

c)

Loaves of Bread	Hours
12	2
24	4
32	6
36	8

d)

Loaves of Bread	Hours
12	3
24	6
32	9
36	12

Name: _____

Date: _____

6. James was saving his money to buy a new bicycle. The bicycle originally cost \$150, but then the store owner marked up its price by 20%. What is the new cost of the bicycle?

a) \$120

b) \$180

c) \$300

d) \$450



7. Multiply and simplify your answer.

$$3\frac{2}{3} \times 2\frac{1}{4} =$$

a) $6\frac{1}{6}$

b) $8\frac{1}{4}$

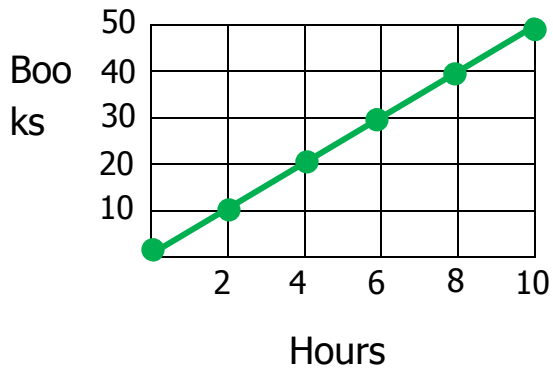
c) $6\frac{1}{4}$

d) $8\frac{1}{6}$

Name: _____

Date: _____

8. The graph below represents the number of books checked out at a library. What is the constant of proportionality?



- a) 2
- b) 5
- c) 10
- d) 20

9. Candice made $3\frac{3}{4}$ pounds of banana bread for a bake sale. She needs to package the bread in boxes. Each bread box holds $\frac{1}{4}$ of a pound of bread. How many boxes will Candice need to package all of her bread?

- a) 4 boxes
- b) 12 boxes
- c) 15 boxes
- d) 18 boxes

Name: _____

Date: _____

10. Which of the following fractions is equivalent to $\frac{-7}{4}$?

a) $\frac{7}{4}$

b) $\frac{4}{7}$

c) $\frac{-21}{12}$

d) $\frac{21}{12}$

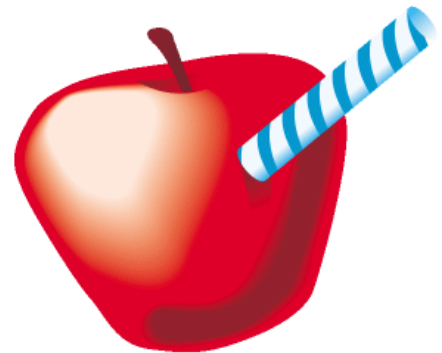
11. The price of organic apple juice at the grocery store can be determined by the equation $J = 4.5b$, where J represents the price and b represents the number of bottles of juice. What is the constant of proportionality (unit rate)?

a) 2.25

b) 4.5

c) 8.1

d) 16.2



Name: _____

Date: _____

12. Look at the table. Choose the linear equation that best represents the quantities shown in the table.

x	y
1	9
2	11
3	13
5	17
7	21

- a) $y = x + 7$
- b) $y = x - 7$
- c) $y = 2x - 7$
- d) $y = 2x + 7$

13. Tommy's grandmother planned to order 5 large pizzas for Tommy's birthday party. She estimated that the cost of the pizzas would be \$60. Their actual cost was \$75. What was her percent error?

- a) 10%
- b) 15%
- c) 20%
- d) 30%

Name: _____

Date: _____

14. Write 0.6 as a fraction in lowest terms.

a) $\frac{3}{5}$

b) $\frac{5}{3}$

c) $\frac{1}{6}$

d) $\frac{2}{3}$

15. Calculate.

$$[-0.4 (5.2)] + [(-1.7) \times (-2.3)]$$

a) 1.83

b) 8.69

c) 1.60

d) 8.83

Name: _____

Date: _____

16. Which of the following expressions is equivalent to $4(3b + 2) - 2b$?

a) $5(2b + 3) - 6$

b) $2(5b + 4)$

c) $10(b + 8)$

d) $3(4b + 4) - 4$

17. Beth is baking cookies. Her recipe calls for $\frac{2}{3}$ cup of milk for every cup of chocolate chips. Beth wants to use up all of her chocolate chips. She has 4 cups of chocolate chips. How much milk will Beth need?

a) $\frac{2}{3}$ cup

b) 2 cups

c) $2\frac{2}{3}$ cups

d) 4 cups



Name: _____

Date: _____

18. Solve the two-step algebra equation.

$$7h - 8 = 41$$

a) $h = 6$

b) $h = 7$

c) $h = 8$

d) $h = 9$

19. Sarit is buying new art supplies. She has \$40 to spend. She wants to buy a sketch pad that costs \$11 and as many paint brushes as she can. Each paint brush costs \$4. Choose the inequality below that shows how many paint brushes (p) Sarit can buy.

a) $p \leq 7$

b) $p \geq 7$

c) $p \leq 8$

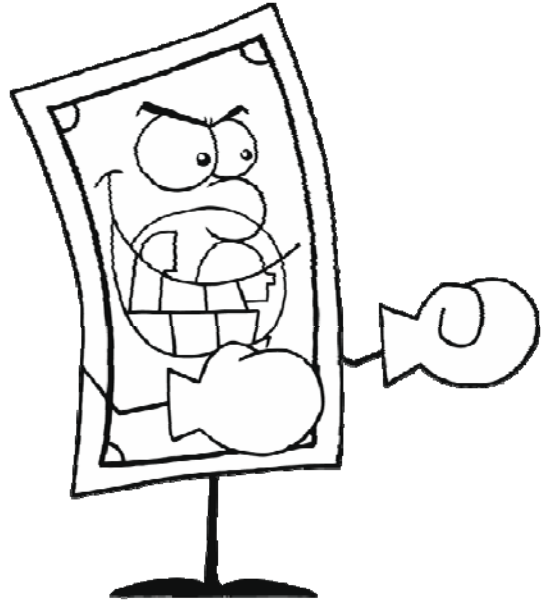
d) $p \geq 8$

Name: _____

Date: _____

20. Mr. Fitz and his family are at a restaurant for dinner. Their total bill is \$73. Mr. Fitz decides to leave a tip of 18% of the total bill for their waitress. How much is the tip that Mr. Fitz leaves?

- a) \$12.48
- b) \$13.14
- c) \$14.60
- d) \$15.14



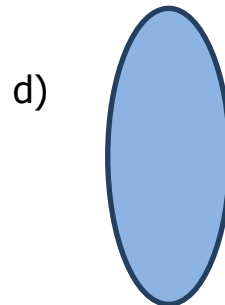
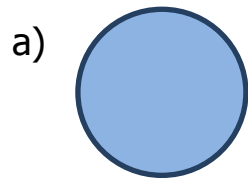
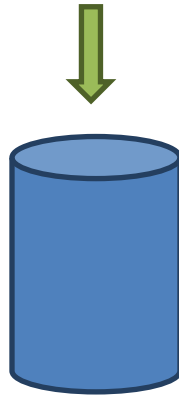
21. Find three consecutive, even integers whose sum is 54.

- a) 12, 20, 22
- b) 14, 18, 22
- c) 16, 18, 20
- d) 17, 19, 21

Name: _____

Date: _____

22. Look at the three-dimensional shape. Choose the answer below that shows how this shape would look when viewed from above.



Name: _____

Date: _____

23. Marcy takes out a loan to pay for graduate school. She borrows \$28,000 for four years. The interest rate is 5.41% annually. Calculate the simple interest that Marcy will owe after 4 years.

- a) \$2634.80
- b) \$4544.40
- c) \$6059.20
- d) \$6720.20

24. When three times a number is decreased by five, the answer is equal to 10. What is the number?

- a) 3
- b) 4
- c) 5
- d) 6

Name: _____

Date: _____

25. Lily is a nanny. This year, she received a salary of \$41,000. Every year, Lily's boss gives her a raise equal to 3% of her salary. How much money in total will Lily make next year?

- a) \$1,230
- b) \$41,000
- c) \$42,230
- d) \$44,000

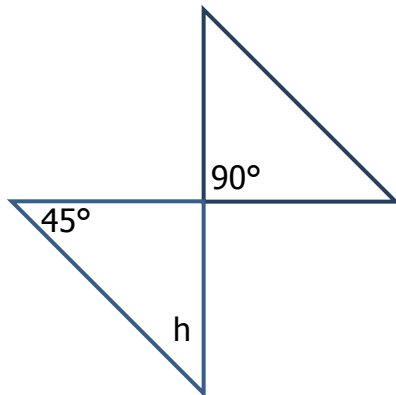
26. Gary is purchasing tablecloths for an event. The tables he needs to cover are round, each with a diameter of 8 feet. What is the area of each tabletop? Use 3.14 for pi.

- a) 25.12 ft²
- b) 50.24 ft²
- c) 100.48 ft²
- d) 200.96 ft²

Name: _____

Date: _____

27. Find the measure of angle h .



- a) 30°
- b) 45°
- c) 60°
- d) 90°

28. The staff at a summer camp notice an increase in raccoon activity on camp property. They want to estimate the raccoon population. They catch and tag 20 raccoons, and release them back into the wild. Later, they catch 60 raccoons and note that 15 of them are tagged. To the nearest whole number, what is the best estimate of the total raccoon population?

- a) 60
- b) 70
- c) 80
- d) 95

Name: _____

Date: _____

29. Three students conducted the same survey about how many people like to dunk their cookies in milk. The results of the surveys are shown below. In which survey did the most people say that they like to dunk their cookies in milk?

- Randy reported that 36 out of the 50 people he surveyed like to dunk their cookies in milk.
- Sandy reported that 70% of the people she surveyed like to dunk their cookies in milk.
- Mandy reported that 0.684 of the people she surveyed like to dunk their cookies in milk.

- a) Randy's survey
- b) Sandy's survey
- c) Mandy's survey

30. Lance creates a scale drawing of the treehouse he wants to build. In his drawing, the perimeter of the treehouse is 20 inches in length. If each inch in Lance's drawing represents 2 feet, then what will be the true perimeter of Lance's new tree house?

- a) 20 feet
- b) 40 feet
- c) 60 feet
- d) 80 feet



Name: _____

Date: _____

31. Mr. Chapman needs to calculate the average test scores his students achieved on their spelling tests. Below are lists of the students' scores on four different tests. On which test did the students achieve the highest **average** score?

- Test 1 scores: 85, 87, 90, 84, 85, 94, 99, 100
- Test 2 scores: 98, 97, 88, 85, 91, 93, 79, 94
- Test 3 scores: 86, 99, 74, 84, 96, 95, 82, 100
- Test 4 scores: 95, 94, 93, 98, 88, 89, 98, 98

- a) Test 1
- b) Test 2
- c) Test 3
- d) Test 4

32. Anthony went with his friends to the amusement park. He took \$50 with him. For lunch, he bought a hot dog that cost \$8 and a drink that cost \$4. Then, he bought two bags of cotton candy. Both bags of cotton candy cost the same amount. Now, Anthony has \$26 left. How much did one bag of cotton candy cost?

- a) \$4
- b) \$6
- c) \$8
- d) \$12

Name: _____

Date: _____

33. Hannah has 15 jelly beans in a bag. She has pink, red, and green jelly beans. If the probability of selecting a red jelly bean is $\frac{7}{15}$, and the probability of selecting a green jelly bean is $\frac{4}{15}$, then what is the probability of selecting a pink jelly bean?

a) $\frac{4}{15}$

b) $\frac{7}{15}$

c) $\frac{11}{15}$

d) 1

34. How many different ways are possible for Ted to arrange the three letters of his first name?

a) 3

b) 6

c) 9

d) 12

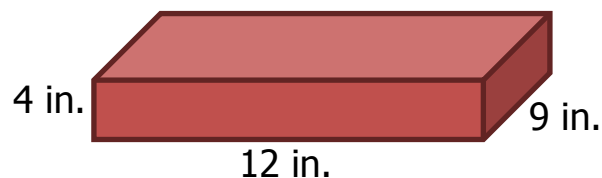
Name: _____

Date: _____

35. Joey is tossing ping-pong balls into a bucket. He tosses a total of 84 balls, but only 38 balls land inside the bucket. If Joey defines landing a ball inside the bucket as a success, then what is the relative frequency of success in his game?

- a) 38%
- b) 45.2%
- c) 54.8%
- d) 84%

36. Tory wants to wrap her brother's birthday present with red wrapping paper. The box she needs to cover measures 12 inches long, 9 inches wide, and 4 inches tall. Tory has 400 square inches of red wrapping paper. Does she have enough wrapping paper to cover the box?

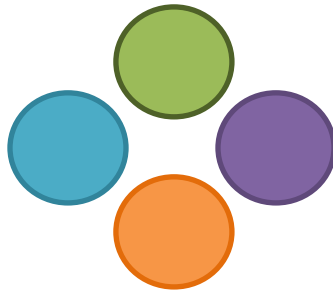


- a) Yes, Tory has enough wrapping paper.
- b) No, Tory does not have enough wrapping paper.

Name: _____

Date: _____

37. Jacob is playing a game. He has to choose one colored ball and one playing card. How many different outcomes are possible?



- a) 4
- b) 8
- c) 16
- d) 32

38. What is the new balance for the credit statement shown?

Billing Date	Previous Balance	Finance Charge	Payments & Credits	New Purchases	New Balance
03/25/14	\$525.50	\$4.50	\$34.98	\$98.45	

- a) \$457.53
- b) \$422.55
- c) \$521.00
- d) \$387.57

Name: _____

Date: _____

39. Choose the amount that matches the following description. This is the way the amount would appear when written out on a check:

One thousand two hundred seventy-five and $\frac{34}{100}$ dollars.

a) \$1,275.00

b) \$1,275.34

c) \$2,175.34

d) \$1,309.00

40. Eleven students measured their heights in inches. Below is a list of their findings. Find the mode of this data.

47, 46, 48, 55, 54, 48, 47, 45, 51, 52, 48

a) 48

b) 49

c) 47

d) 10

Name: _____

Date: _____

41. Steve has a box in which he keeps his marble collection. Steve has 11 blue marbles, 9 black marbles, and 5 cat's eye marbles in his collection. If Steve draws a single marble from the box without looking, what is the probability that it will be a cat's eye marble?

- a) 5%
- b) 20%
- c) 25%
- d) 50%



42. Victoria is making fruit salad for a party. The number of servings is proportional to the number of fruits used. What is the constant of proportionality shown in the table?

Number of servings	3	4	6	10
Number of fruits used	9	12	18	30

- a) 2
- b) 3
- c) 4
- d) 6

Name: _____

Date: _____

43. Martin is trying to determine which of the three hot lunch choices is the most popular on a given day. He surveys every third student exiting the hot lunch line. He asks which lunch choice each student chose. Which of the following would have improved Martin's research?

- a) Ask all students what their favorite foods are.
- b) Ask every third student how often he/ she eats hot lunch.
- c) Survey all students exiting the hot lunch line.
- d) Obtain a list of ingredients used to make the hot lunch foods.

Name: _____

Date: _____

Grade 7 Math Test: Answer Key

1) A

16) B

31) D

2) B

17) C

32) B

3) D

18) B

33) A

4) A

19) A

34) B

5) A

20) B

35) B

6) B

21) C

36) A

7) B

22) A

37) C

8) B

23) C

38) A

9) C

24) C

39) B

10) C

25) C

40) A

11) B

26) B

41) B

12) D

27) B

42) B

13) C

28) C

43) C

14) A

29) A

15) A

30) B

Name: _____

Date: _____

Grade 7 Math Test: Answer Sheet

- | | | |
|-----------|-----------|-----------|
| 1. _____ | 16. _____ | 31. _____ |
| 2. _____ | 17. _____ | 32. _____ |
| 3. _____ | 18. _____ | 33. _____ |
| 4. _____ | 19. _____ | 34. _____ |
| 5. _____ | 20. _____ | 35. _____ |
| 6. _____ | 21. _____ | 36. _____ |
| 7. _____ | 22. _____ | 37. _____ |
| 8. _____ | 23. _____ | 38. _____ |
| 9. _____ | 24. _____ | 39. _____ |
| 10. _____ | 25. _____ | 40. _____ |
| 11. _____ | 26. _____ | 41. _____ |
| 12. _____ | 27. _____ | 42. _____ |
| 13. _____ | 28. _____ | 43. _____ |
| 14. _____ | 29. _____ | |
| 15. _____ | 30. _____ | |