

EDMUND W. GORDON



**Rising Grade 6 Math 2025
Summer Homework Packet**



BROOKLYN LAB
CHARTER SCHOOL

Name: _____

Skills Review for Students Entering Sixth Grade

The following is a review of math skills from Fifth Grade. Please complete this review over the summer. It is due on the first day of class. The purpose of the packet is to provide an opportunity for you to refresh yourself on some of the math skills that you will be using throughout Sixth Grade. Solutions to the problems are attached for you to check your answers. If you have difficulty with any topics, it is recommended that you invest some time over the summer reviewing those particular skills. We recommend using the Khan Academy 5th Grade resources found online for extra support. The "Math with Mr. J" videos on youtube are also excellent review tools if students are stuck. Calculators should not be used on this review. Please show all work where calculations are necessary.

Place Value

1) Name the place of the underlined digit. 5,344,926

- A. millions
- B. hundred thousands
- C. ten thousands
- D. thousands

2) Name the place of the underlined digit. 3,113.205

- A. Thousandths
- B. Thousands
- C. Hundredths
- D. Hundreds

3) What is the standard form of three million, twenty-one thousand, ninety?

- A. 3,021,090
- B. 3,021,900
- C. 3,210,900
- D. 3,210,900

4) Rewrite using a base number and an exponent. $10 \times 10 \times 10 \times 10 \times 10$

- A. 10^8
- B. 5^{10}
- C. 10^5
- D. 10^4

5) Find the value of 10^6 .

- A. 100
- B. 10,000
- C. 100,000
- D. 1,000,000

Add and Subtract Whole Numbers and Decimals

6) Round 6.239 to the nearest tenth.

- A. 6.3
- B. 6.24
- C. 6.23
- D. 6.2

7) Estimate the sum. $5.763 + 8.054 =$

- A. 12
- B. 14
- C. 16
- D. 18

8) Evaluate the sum. $9.232 + 48.005 + 6.537 =$

- A. 205.69
- B. 122.607
- C. 63.774
- D. 20.574

9) Evaluate the sum. $3.2 + 4.65 =$

- A. 7.85
- B. 4.97
- C. 49.7
- D. 7.97

10) Evaluate the difference. $53,432 - 25,674$

- A. 79,106
- B. 38,868
- C. 32,242
- D. 27,758

11) Jan's lunch bill is \$5.74. She pays with a \$10.00 bill. How much change does she receive?

- A. \$5.74
- B. \$4.74
- C. \$4.26
- D. \$5.26

Multiply Whole Numbers

12) What is the best estimate for 512×86 ?

- A. 50,000
- B. 36,000
- C. 45,000
- D. 32,000

13) Evaluate. $(8 \times 4) \times 5 =$

- A. 320
- B. 160
- C. 32
- D. 17

14) Evaluate. $8 \times 300 =$

- A. 240
- B. 2400
- C. 320
- D. 1100

15) Evaluate. $32 \times 156 =$

- A. 5,312
- B. 780
- C. 312
- D. 4,992

Multiply Decimals

16) Estimate the product. $35.7 \times 249 =$

- A. 800
- B. 900
- C. 8,000
- D. 80,000

17) Estimate the product. $7.21 \times 4.67 =$

- A. 28
- B. 322
- C. 35
- D. 240

18) Evaluate the product. $45.67 \times 10 =$

- A. 456.7
- B. 4.567
- C. 4567
- D. 0.4567

19) Evaluate the product. $5.42 \times 10^2 =$

- A. 5.42
- B. 54.2
- C. 542
- D. 542

20) Multiply. $2.7 \times 500 =$

- A. 13,500
- B. 1,350
- C. 103.5
- D. 10.35

21) Multiply. $\$31.90 \times 7$

A. \$133.30

B. \$22.33

C. \$223.30

D. \$217.30

22) Multiply. 5.21×6.8

A. 35.428

B. 354.28

C. 72.94

D. 7.294

Divide Whole Numbers

23) Estimate the quotient. $4,572 \div 88 =$

- A. 5
- B. 50
- C. 350
- D. 500

24) What is the best estimate for $7,150 \div 91$

- A. 90
- B. 80
- C. 800
- D. 900

25) Divide. $987 \div 100$

- A. 9.87
- B. 9,870
- C. 0.987
- D. 987

26) Divide. $4.328 \div 1,000$

- A. 4,328
- B. 43.28
- C. 0.04328
- D. 0.004328

27) The zoo collected \$2884 in ticket fees one day. If each ticket cost \$7, how many people bought tickets?

- A. 402
- B. 412
- C. 512
- D. 522

28) Divide. $1495 \div 23$

- A. 65
 - B. 79
 - C. 787
 - D. 650
-

Divide Decimals

29) Divide mentally. $94.78 \div 100 =$

- A. 9.478
- B. 0.9478
- C. 0.09478
- D. 0.009478

30) Estimate the quotient. $8.45 \div 2.34$

- A. 4
- B. 3
- C. 16
- D. 6

31) Evaluate the quotient. $62.5 \div 5 =$

- A. 125
- B. 62
- C. 67.5
- D. 12.5

32) Divide and round to the tenths place: $56.4 \div 2.47$

- A. 23.0
- B. 22.9
- C. 22.8
- D. 23.1

33) Evaluate. $26.67 \div 4.2 =$

- A. 63.5
- B. 6.30
- C. 5.99
- D. 6.35

34) Solve using order of operations:

$$22 + 7 \times 3 - (12 \div 4)$$

- A. 84
- B. 40
- C. 31
- D. 47

35) Solve using order of operations: $10^3 + 6 \times 3 - 2$

- A. 52
- B. 208
- C. 1016
- D. 80

Introduction to Number Theory and Fractions

36) Which number is divisible by 2?

- A. 223
- B. 234
- C. 109
- D. 441

37) Which number is divisible by 3?

- A. 566
- B. 897
- C. 421
- D. 256

38) Which number is divisible by 5?

- A. 244
- B. 690
- C. 521
- D. 256

39) Which number is divisible by 6?

- A. 425
- B. 783
- C. 224
- D. 798

40) Which number is divisible by 10?

- A. 798
- B. 435
- C. 250
- D. 752

41) The Key Tennis team plays 40 games per season. So far, they have played 35 games. What fraction of the season have they played?

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{5}{8}$
- D. $\frac{7}{8}$

42) What is the simplest form of $\frac{20}{35}$?

- A. $\frac{4}{5}$
- B. $\frac{5}{7}$
- C. $\frac{4}{7}$
- D. $\frac{2}{5}$

43) Which fraction is equivalent to $\frac{3}{4}$?

- A. $\frac{4}{3}$
- B. $\frac{5}{6}$
- C. $\frac{9}{16}$
- D. $\frac{21}{28}$

44) Write 0.45 as a fraction in simplest form.

- A. $\frac{1}{3}$
- B. $\frac{2}{5}$
- C. $\frac{9}{20}$
- D. $\frac{1}{2}$

45) Write $13/1000$ as a decimal

- A. 1.3
 - B. 0.13
 - C. 0.013
 - D. 0.0013
-

46) Order from least to greatest. $\frac{1}{4}$, 0.23, $\frac{2}{9}$

- A. $\frac{2}{9}$, 0.23, $\frac{1}{4}$
- B. 0.23, $\frac{1}{4}$, $\frac{2}{9}$
- C. $\frac{1}{4}$, $\frac{2}{9}$, 0.23
- D. $\frac{2}{9}$, $\frac{1}{4}$, 0.23

47) Convert $\frac{15}{11}$ to a mixed number.

- A. $4\frac{1}{11}$
- B. $1\frac{1}{4}$
- C. $1\frac{4}{11}$
- D. $\frac{11}{15}$

48) Convert $3\frac{5}{9}$ to an improper fraction.

A. $\frac{135}{9}$

B. $\frac{32}{9}$

C. $\frac{45}{3}$

D. $\frac{27}{5}$

49) Order $4\frac{2}{3}$, 4.59, and $\frac{24}{5}$ from least to greatest.

A. 4.59, $\frac{24}{5}$, $4\frac{2}{3}$

B. 4.59, $4\frac{2}{3}$, $\frac{24}{5}$

C. $4\frac{2}{3}$, $\frac{24}{5}$, 4.59

D. $\frac{24}{5}$, 4.59, $4\frac{2}{3}$

Add and Subtract Fractions

50) $\frac{2}{7} + \frac{3}{7} =$

A. $\frac{5}{14}$

C. $\frac{5}{7}$

B. $\frac{6}{49}$

D. $\frac{6}{7}$

51) $\frac{4}{5} + \frac{3}{10} =$

A. $\frac{7}{15}$

C. $\frac{7}{10}$

B. $\frac{12}{50}$

D. $1\frac{1}{10}$

52) $\frac{2}{3} + \frac{3}{4} =$

A. $1\frac{5}{12}$

C. $1\frac{5}{7}$

B. $\frac{11}{12}$

D. $1\frac{1}{2}$

53) $5\frac{1}{3} + 4\frac{5}{6} =$

A. $10\frac{5}{9}$

B. $10\frac{1}{3}$

C. $10\frac{1}{6}$

D. $9\frac{4}{5}$

54) $2\frac{3}{10} + \frac{1}{5} =$

A. $2\frac{4}{15}$

B. $2\frac{3}{50}$

C. $2\frac{1}{2}$

D. $\frac{1}{2}$

55) $\frac{8}{9} - \frac{2}{9} =$

A. $1\frac{1}{9}$

B. $\frac{2}{3}$

C. $\frac{6}{18}$

D. $\frac{4}{9}$

56) $\frac{4}{5} - \frac{3}{10} =$

A. $\frac{1}{5}$

B. $1\frac{1}{10}$

C. $\frac{1}{10}$

D. $\frac{1}{2}$

57) $6\frac{5}{6} - 2\frac{7}{12} =$

A. $\frac{1}{4}$

B. $4\frac{1}{3}$

C. $4\frac{1}{4}$

D. $8\frac{5}{12}$

58) $4\frac{3}{8} - \frac{9}{10} =$

A. $4\frac{4}{5}$

B. $4\frac{1}{5}$

C. $3\frac{2}{5}$

D. $3\frac{19}{40}$

59) A 20 pound bag of nails has $7\frac{1}{4}$ pounds left. How many pounds of nails have been removed?

A. $13\frac{1}{4}$ pounds

B. $13\frac{1}{8}$ pounds

C. $12\frac{3}{4}$ pounds

D. $12\frac{1}{4}$ pounds

Multiply Fractions

60) $4 \times \frac{3}{5} =$

A. $2\frac{2}{5}$

C. $6\frac{2}{3}$

B. $\frac{3}{5}$

D. $\frac{3}{20}$

61) $\frac{3}{4} \times \frac{2}{5} =$

A. $\frac{3}{20}$

C. $\frac{8}{15}$

B. $1\frac{7}{8}$

D. $\frac{3}{10}$

62) $\frac{9}{20} \times \frac{5}{18} =$

A. $\frac{1}{45}$

C. $2\frac{1}{4}$

B. $\frac{1}{8}$

D. 8

63) $1\frac{5}{8} \times \frac{3}{5} =$

A. $1\frac{39}{40}$

B. $1\frac{3}{40}$

C. $\frac{39}{40}$

D. $1\frac{8}{13}$

64) $5\frac{1}{3} \times 3\frac{3}{8} =$

A. $15\frac{1}{8}$

B. $15\frac{1}{2}$

C. 16

D. 18

Divide Fractions

65) $3 \div \frac{1}{4} =$

A. $\frac{3}{4}$

C. 12

B. $\frac{1}{12}$

D. $1\frac{1}{3}$

66) $15 \div \frac{1}{5} =$

A. 75

C. 3

B. $\frac{1}{75}$

D. $\frac{1}{3}$

67) $\frac{1}{6} \div 4 =$

A. 24

C. $1\frac{1}{2}$

B. $\frac{1}{24}$

D. $\frac{2}{3}$

68) $\frac{1}{2} \div 9 =$

A. $\frac{1}{3}$

C. $4\frac{1}{2}$

B. 18

D. $\frac{1}{18}$

Geometry

69) Mr. Myers is buying a rug to fit his hallway. The rug is 20 feet by 15 feet. What is the area of the rug?

A. 35 ft.²

B. 300 ft.³

C. 300 ft.²

D. 70 ft.²

70) What is the length of a side of a square which has an area of 144 cm²?

A. 48 cm.

B. 31 cm.

C. 12 cm.

D. 36 cm.

71) The city built a square park that has a perimeter of 4,400 yards. How long is one side of this park?

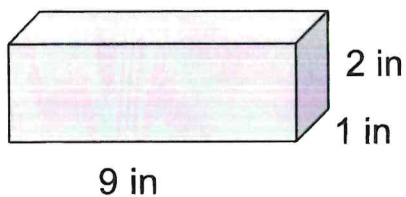
- A. 2,200 yards
 - B. 1,100 square yards
 - C. 1,100 yards
 - D. 16,800 yards
-

72) What is the perimeter of a rectangle that is 14 ft x 8 ft?

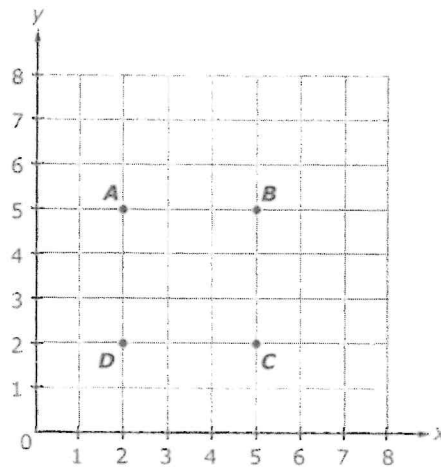
- A. 112 ft^2
- B. 44 ft^2
- C. 112 ft
- D. 44 ft

73) Find the volume of the rectangular prism.

- A. 18 in^2
- B. 9 in^2
- C. 54 in^3
- D. 18 in^3



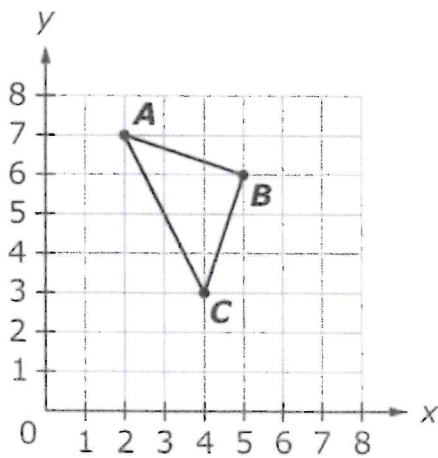
74) Use the coordinate plane to determine which point is located at $(5, 2)$?



- A. Point A
- B. Point B
- C. Point C
- D. Point D

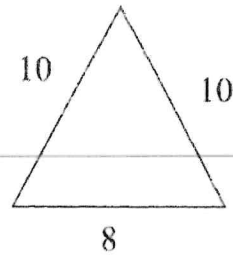
75) Use the coordinate plane to determine which set of ordered pairs shows the coordinates of points for the triangle: A, B, and C?

- A. $(2, 7), (5, 6), (4, 3)$
- B. $(7, 2), (5, 6), (3, 3)$
- C. $(7, 2), (6, 5), (3, 4)$
- D. $(2, 7), (6, 5), (4, 3)$



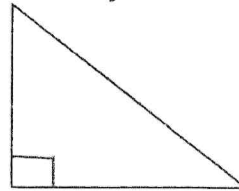
76) Classify the triangle.

- A. Equilateral
- B. Isosceles
- C. Scalene
- D. Right Triangle



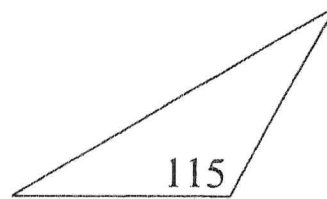
77) Classify the triangle.

- A. Equilateral
- B. Isosceles
- C. Scalene
- D. Right Triangle



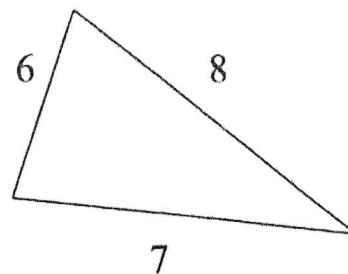
78) Classify the triangle.

- A. Acute
- B. Obtuse
- C. Right
- D. Isosceles



79) Classify the triangle.

- A. Acute
- B. Obtuse
- C. Scalene
- D. Isosceles
- E. Right



80) Classify the triangle.

- A. Acute
- B. Obtuse
- C. Right
- D. Isosceles
- E. Equilateral

