Summer Review

Review packet for students entering Mathematics 7 CP (109 problems)

Please complete all problems, showing all your work. Remember, the dot (●) you see starting with problem #5 is another symbol for multiplication just like (x).

OPERATIONS WITH WHOLE NUMBERS

7.
$$16.12.7 =$$

9.
$$7608 \div 12 =$$

OPERATIONS WITH DECIMALS

19.
$$59.7 \div 0.4 =$$

Greatest Common Factor (GCF) and the Least Common Multiple (LCM)

- **21.** Find the GCF of the numbers 15 and 35
- 22. Find the GCF of the numbers 6, 36, and 60
- **23.** Find the LCM of the numbers 9 and 15
- 24. Find the LCM of the numbers 3, 4, and 15

Note: the following sections on fractions and mixed numbers will be considered background knowledge in 7th grade CP Math. Mastery of these skills is essential for success in math. Students needing extra practice may go to https://www.math-drills.com/fractions.php.

OPERATIONS WITH FRACTIONS

25.Simplify the fraction:
$$\frac{18}{144}$$
 =

26. Write the reciprocal of
$$\frac{7}{8}$$

27.
$$\frac{4}{7} + \frac{9}{28} =$$

28.
$$\frac{3}{5} + \frac{2}{7} =$$

29.
$$\frac{3}{5} + \frac{7}{9} + \frac{4}{15} =$$

30.
$$\frac{7}{9} - \frac{4}{15} =$$

31.
$$\frac{7}{8} - \frac{1}{5} - \frac{3}{10} =$$

32.
$$\frac{10}{19} \cdot 38 =$$

33.
$$\frac{3}{20} \cdot \frac{5}{18} =$$

34.
$$\frac{7}{8} \div 28 =$$

35.
$$\frac{5}{16} \div \frac{35}{48} =$$

MIXED NUMBERS

36.Change to fraction:
$$5\frac{3}{7}$$
 =

$$\frac{108}{31}$$
 =

38.
$$5\frac{2}{9} + 7\frac{8}{15} =$$

39.
$$9\frac{4}{5} + 8\frac{1}{2} =$$

40.
$$6-2\frac{5}{6}=$$

41.
$$2\frac{5}{6} - 1\frac{1}{7} =$$

42.
$$10\frac{2}{5} - 7\frac{13}{35} =$$

43.
$$3\frac{1}{3} \cdot 6\frac{3}{5} =$$

44.
$$2\frac{3}{7} \cdot \frac{1}{17} =$$

45.
$$2\frac{1}{3} \div 1\frac{3}{4} =$$

46.
$$\frac{3}{7} \div 3\frac{3}{5} =$$

ORDER OF OPERATIONS

48.
$$3+18 \div 3-4=$$

49.
$$8-14 \div (9-2) =$$

50.
$$4-24 \div 2^3 =$$

51.
$$65 \div 5 \cdot 2 =$$

52.
$$2(9-2)^2 - 6 \cdot 3 + 4^2 =$$

53.
$$2 \cdot (7+5) \div 4 =$$

54.
$$58+2\cdot5-12\div4=$$

55.
$$6(14+4^2) =$$

56.
$$72 \div [(15-9) \cdot 2] =$$

OPERATIONS WITH INTEGERS

57.
$$12 + (-17) =$$

58.
$$-23 + (-5) =$$

59.
$$-105-3=$$

60.
$$-37 - (-12) =$$

62.
$$-8 \cdot 13 =$$

63.
$$-23 \cdot (-5) =$$

64.
$$68 \div (-17) =$$

65.
$$-126 \div (-14) =$$

EQUATIONS

66.
$$17 + x = 29$$

67.
$$r-68=23$$

68.
$$15 \cdot z = 0$$

69.
$$y \cdot 7 = 91$$

70.
$$\frac{k}{9} = 16$$

71.
$$a-6.2=7.18$$

72.
$$n+4.09=6.38$$

73.
$$3y = 7.86$$

74.
$$\frac{p}{7} = 8.6$$

75.
$$x-12\frac{3}{4}=17\frac{2}{5}$$

76.
$$5\frac{2}{3} = p + 2\frac{2}{9}$$

77.
$$\frac{3b}{4} = 1\frac{1}{2}$$

78.
$$\frac{s}{8} = 6\frac{1}{4}$$

79.
$$\frac{5}{6}r = 2\frac{1}{12}$$

RATIOS AND PROPORTIONS

80. Are the ratios
$$\frac{45}{3}$$
 and $\frac{9}{5}$ equivalent?

81. Are the ratios
$$\frac{5}{7}$$
 and $\frac{15}{21}$ equivalent?

82.
$$\frac{2}{n} = \frac{3}{24}$$

83.
$$\frac{2}{3} = \frac{18}{n}$$

84.
$$\frac{n}{9} = \frac{12}{27}$$

85.
$$\frac{7}{3} = \frac{n}{12}$$

PERCENTS

Complete the table:

	Percent	Decimal	Fraction
86.		0.045	
87.			$\frac{7}{20}$
88.	35%		

89. What percent of 140 is 28?

- **90.** 135 is 45% of what number?
- **91.** What number is 5% of 340?

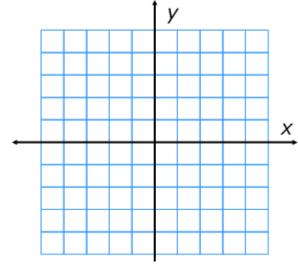
EXPONENTS

- **93.** Write as an exponent $5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 =$
- **94.** Evaluate the exponent $5^3 =$
- **95.** Evaluate the exponent $2^6 =$
- **96.** Evaluate the exponent $10^6 =$

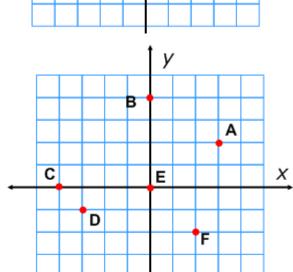
THE COORDINATE PLANE

97. Graph each point:

A(2,0), B(-3,-4), C(2,-5), D(-1,4), E(1,2), F(0,-3)



98. Write the coordinates of the points:



WRITING DECIMALS AS FRACTIONS AND MIXED NUMBERS

99. Write the decimal 0.31 as fraction or mixed number.

100. Write the decimal 2.05 as fraction or mixed number.

101. Write the fraction $\frac{3}{40}$ as decimal.

102. Write the fraction as $\frac{9}{20}$ decimal.

103. Write the fraction $\frac{5}{12}$ as decimal.

104. Write the mixed number as decimal $1\frac{2}{5}$.

105. Write the mixed number as decimal $3\frac{1}{7}$.

ORDERING NUMBERS

106. Order the numbers from least to greatest: 246.8, 248.6, 244.9, 246.5

107. Order the numbers from least to greatest: -9, -6.7, -7.24, -14

108. Order the numbers from least to greatest: -17.8, $\frac{3}{4}$, 0.8, -15, 1.25

109. Order the numbers from least to greatest: -10, 2^3 , $\frac{2}{7}$, 0.12, 0.102, -9.5, $\frac{1}{3}$