

Algebra I Review Packet Name \_\_\_\_\_

**For incoming Algebra I CP**

Solve the problems

**I.) FRACTIONS**

**A.) Reduce to simplest form.**

1.)  $\frac{3}{9}$

2.)  $\frac{4}{10}$

3.)  $\frac{24}{32}$

**B.) Change to improper fractions.**

4.)  $2\frac{3}{8}$

5.)  $3\frac{6}{7}$

6.)  $7\frac{3}{4}$

**C.) Change to mixed numbers.**

7.)  $\frac{7}{3}$

8.)  $\frac{21}{9}$

9.)  $\frac{42}{16}$

**D.) Adding fractions.**

10.)  $2\frac{7}{10} + 8\frac{1}{2} =$

11.)  $\frac{1}{7} + \frac{3}{14} =$

12.)  $3\frac{2}{3} + 2\frac{2}{5} + 4\frac{5}{6} =$

13.)  $5\frac{1}{8} + 2\frac{3}{5} - 4\frac{1}{10} =$

**E.) Subtract fractions.**

14.)  $5\frac{5}{12} - 2\frac{7}{8} =$

15.)  $8\frac{2}{3} - 1\frac{2}{9} =$

16.)  $6\frac{1}{3} - 2\frac{2}{3} =$

17.)  $9 - 4\frac{2}{7} =$

**F.) Multiply fractions**

18.)  $\frac{2}{3} \times 9 =$

19.)  $1\frac{1}{8} \times 5\frac{1}{2} =$

20.)  $\frac{4}{8} \times \frac{3}{5} \times \frac{1}{2} =$

21.)  $5\frac{2}{5} \times 6\frac{1}{2} =$

**G.) Division of fractions**

22.)  $2\frac{7}{8} \div \frac{1}{2} =$

23.)  $2\frac{2}{5} \div 2\frac{1}{3} =$

24.)  $4\frac{1}{6} \div 5 =$

25.)  $6 \div \frac{1}{6} =$

**H.) Fractions, Decimals and Percents**  
**Complete the chart. Simplify all fractions.**

	Fraction	Decimal	Percent
26.)	$\frac{7}{10}$		
27.)			102%
28.)			$\frac{3}{4}\%$
29.)		0.125	
30.)		0.25	
31.)	$\frac{2}{3}\%$		
32.)		0.8	
33.)			0.5%

**I) Solve these percent problems.**

34.) What number is 15% of 60?

35.) 66 is 11% of what number?

36.) 308 is what percent of 350?

37.) 5 is what percent of 4?

38.) What is 30% of 30?

39.) 16 is 25 % of what number?

40.) The price of milk increased from \$1.89 a gallon to \$2.09 a gallon. What was the percent of increase?

41.) A \$150 leather jacket is going on sale for a 25% discount. How much will the jacket cost on sale?

42.) Jim bought 3 CD's at a cost of \$14.99 each. What will he pay including 7% sales tax?

43.) The price of gas last summer was \$3.80 and this summer it is \$1.90. What is the percent of decrease?

44.) The sale price of an LCD TV is \$280, representing 30% off the regular price. What is the original price?

45.) What is the final cost of a \$21,000 car with a sales tax of 7%?

### J.) Integers

46.)  $-4+(-5)$

47.)  $-3 + (-8) + 12$

48.)  $7-14$

49.)  $(-\frac{1}{2})(-\frac{1}{4})(5) =$

50.)  $13-7-15$

51.)  $-(-26)$

52.)  $(8)(-6)(-1)$

53.)  $165 \div (-5)$

54.)  $-150 \div (-6)$

### K.) Equations

55.)  $x + 2 = 5$

56.)  $x - 2 = 3$

57.)  $3x = 15$

58.)  $\frac{1}{2}x = 8$

59.)  $3x + 7 = 28$

60.)  $4x - 8 = 40$

### L.) CRITICAL THINKING

61. Tasha bought salads at \$2.75 each and cartons of milk at \$.80 each. The total cost was \$16.15. How many of each did Tasha buy?

62. If five turkey club sandwiches cost \$18.75, how much would seven sandwiches cost?

63. Nguyen wants to arrive at school no later than 7:25 A.M. for his first class. It takes him 25 minutes to shower and dress, 15 minutes to eat breakfast. and at least 20 minutes to get to school. What time should he plan to get out of bed?

64. Carl has \$135 in the bank and plans to save \$5 per week. Jean has \$90 in the bank and plans to save \$ 10 per week. How many weeks will it be before Jean has at least as much in the bank as Carl?

**M.) Simplify.**

65.)  $4(x+3)$

66.)  $-2(3x-5)$

67.)  $2(3b+1)-5$

68.)  $2(x+3)-5(2x+1)$

69.)  $8y-7+7y-15$

70.)  $30x-50-12x+14$