Welcome to Applied Algebra 1A

We would like to take the time to welcome you to Applied Algebra 1A. This course covers the first half of Algebra 1 and builds a strong foundation for high school mathematics. In order to be successful in this course, it is imperative that you come to class prepared with the following materials. There will be a materials check the first day of school.

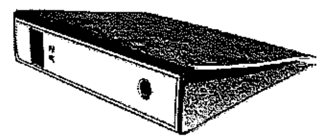
1) Large 3 Ring Binder with Three Sections

a) Notes/HW: Notes and HW will go in the first section in order by date.

b) Vocabulary: You will be given vocabulary sheets in which you will list all words, definitions, and examples.

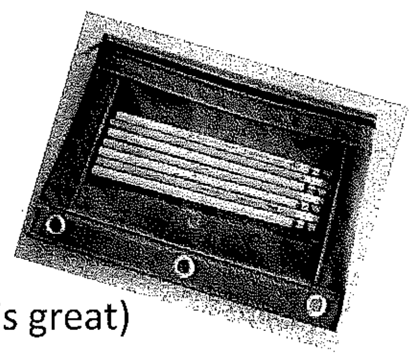
c) Tests/Quizzes: You will keep all tests and quizzes and make corrections. This will help you study for the midterm and final problem set.

Make sure that you have lined paper **and** graph paper.



2) Zippered Pouch with the following tools

a) At least 6 pencils
b) At least 2 colored pencils to correct HW
c) Ruler
d) Protractor
e) TI 83 or 84 Graphing Calculator (Plus Silver Edition is great)



If you are unable to get a graphing calculator, bring a signed note to your teacher the first day of school explaining the situation.

Hopefully this will get us off to a great start. We look forward to a great year! Please don't hesitate to e-mail us with any questions:

Have a great summer!

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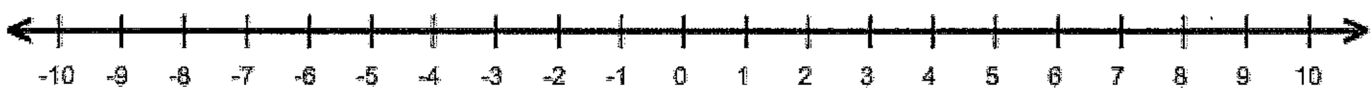
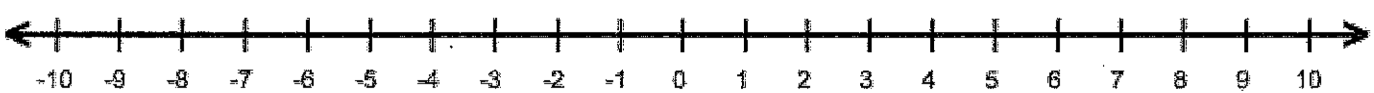
Place these numbers in the proper spots on the given number lines:

1.) -8.7, -6.5, 5.3, 6.1, 9.8



2.) $(-8\frac{3}{4})$, $(-6\frac{1}{4})$, $(-2\frac{3}{4})$, $(4\frac{3}{4})$, $(7\frac{3}{4})$

3.) $-\frac{19}{4}$, $-\frac{19}{6}$, $-\frac{3}{4}$, $\frac{11}{8}$, $\frac{27}{6}$



Pre-Algebra Name________________________________ ID: 1

Assignment

Date________________ Period____

Simplify each. Write your answer as a mixed number when possible.

1) $\frac{96}{60}$

2) $\frac{42}{36}$

3) $\frac{16}{12}$

4) $\frac{54}{36}$

5) $\frac{32}{12}$

6) $\frac{36}{24}$

7) $\frac{30}{24}$

8) $\frac{24}{18}$

9) $\frac{140}{100}$

10) $\frac{36}{30}$

Write each as a fraction in simplest form.

11) 0.51

12) 0.61

13) 0.5

14) 0.32

15) 0.4

16) 0.94

17) 0.3

18) 0.06

19) 0.42

20) 0.85

Write each as a percent. Use repeating decimals when necessary.

21) 0.32

22) 0.0036

23) 0.0012

24) 0.94

25) 0.0032

26) 0.09

27) 0.19

28) 0.00999

29) 0.303

30) 0.9

Write each as a percent. Round to the nearest percent.

31) $\frac{3}{10}$

32) $\frac{1}{24}$

33) $\frac{1}{9}$

34) $\frac{3}{20}$

35) $\frac{1}{8}$

36) $\frac{27}{40}$

37) $\frac{2}{5}$

38) $\frac{17}{25}$

39) $\frac{71}{90}$

40) $\frac{11}{25}$

Evaluate each expression WITHOUT A CALCULATOR.

41) $(-8)-3$

42) $(-5)-(-2)$

43) $(-8)+6$

44) $(-3)-(-8)$

45) $(-4)-7$

46) $(-5)+1$

47) $(-2)+1$

48) $(-5)+3$

49) $(-6)-2$

50) $5+(-7)$

51) $(-3)+8$

52) $(-4)-(-3)$

53) $(-8)-(-1)$

54) $(-4)+(-8)$

55) $(-1)+6$

56) $3-(-4)$

57) $8+(-4)$

58) $(-5)+2$

59) $7+(-3)$

60) $(-3)+(-1)$

Find each quotient WITHOUT A CALCULATOR.

61) $-28 \div 7$

62) $28 \div -4$

63) $-30 \div -3$

64) $63 \div -7$

65) $-36 \div 6$

66) $-18 \div -6$

67) $-40 \div -10$

68) $-30 \div 3$

69) $-9 \div -3$

70) $5 \div -5$

Find each product WITHOUT A CALCULATOR.

71) -4×3

72) 4×-3

73) 3×-3

74) 10×-8

75) -4×-2

76) -7×9

77) -6×10

78) -3×4

79) 6×-7

80) 6×-2

Evaluate each expression WITHOUT A CALCULATOR.

81) $2 + \frac{1}{3}$

82) $\frac{2}{5} + \frac{3}{5}$

83) $\frac{3}{2} - \frac{3}{2}$

84) $\frac{3}{4} + \frac{7}{4}$

85) $2 - \frac{1}{2}$

86) $3 - \frac{11}{7}$

87) $\frac{5}{4} + \frac{1}{4}$

88) $\frac{1}{2} - \frac{1}{2}$

89) $\frac{9}{7} + \frac{4}{7}$

90) $\frac{7}{6} - \frac{5}{6}$

Find each product WITHOUT A CALCULATOR.

91) $\frac{14}{9} \times \frac{3}{2}$

92) $\frac{3}{2} \times \frac{8}{5}$

93) $2 \times \frac{5}{6}$

94) $9 \times \frac{1}{3}$

95) $9 \times \frac{1}{4}$

96) $\frac{3}{2} \times \frac{11}{9}$

97) $6 \times \frac{5}{8}$

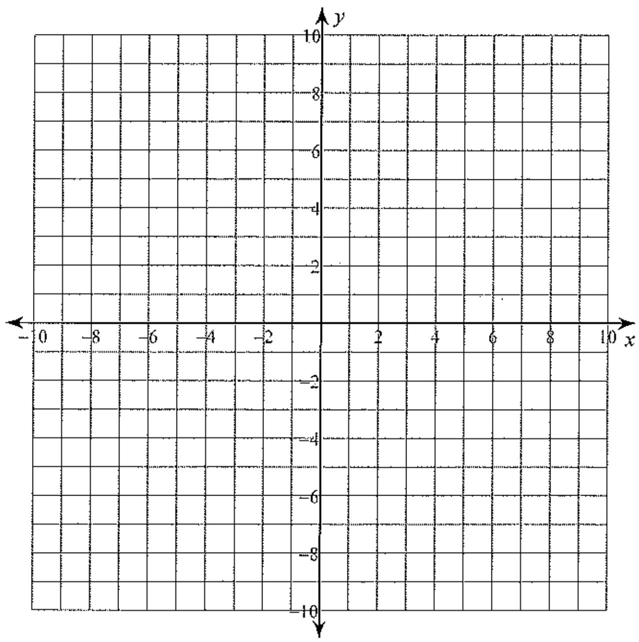
98) $\frac{1}{4} \times \frac{3}{2}$

99) $\frac{8}{5} \times \frac{1}{2}$

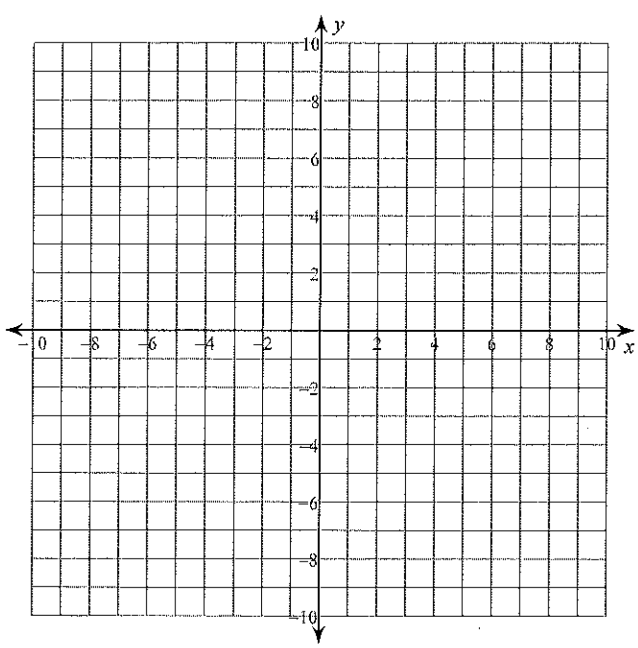
100) $2 \times \frac{1}{5}$

Plot each point.

101) $D(-6, -8)$ $E(6, -7)$ $F(-10, -3)$
$G(0, -3)$ $H(-3, -7)$ $I(-1, -10)$
$J(10, -8)$ $K(9, 0)$ $L(-1, 1)$
$M(-7, 9)$

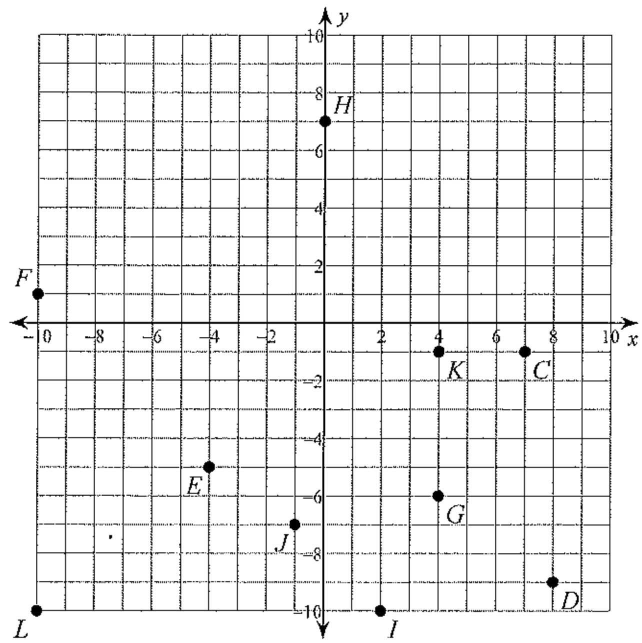


102) $C(-10, 5)$ $D(-10, -2)$ $E(-2, 3)$
$F(9, -2)$ $G(-8, 2)$ $H(1, -5)$
$I(-5, 9)$ $J(-2, -10)$ $K(-9, 6)$
$L(1, 4)$

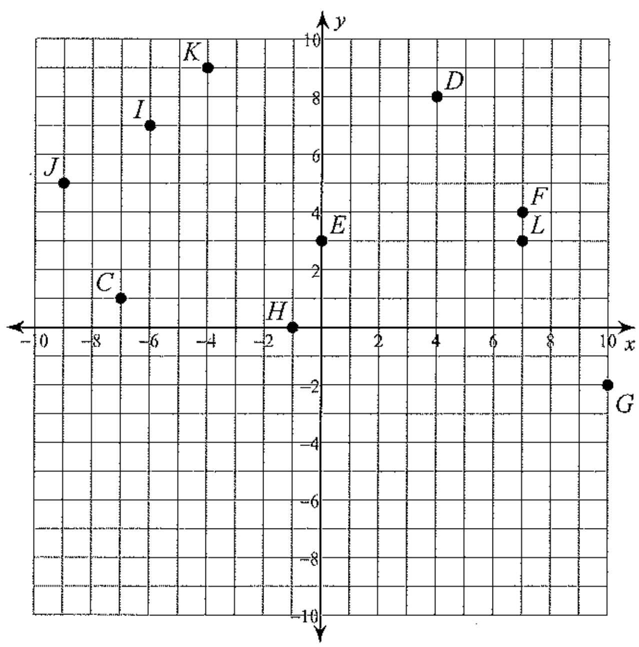


State the coordinates of each point.

103)



104)



105) How old is Amy if she was 30 years old seventeen years ago?

106) Pranav ran 40 miles less than Jessica last week. Pranav ran 5 miles. How many miles did Jessica run?

107) Rob and his best friend found some money in a trash can. They split the money evenly, each getting $12. How much money did they find?

108) Krystal and nine of her friends went out to eat. They decided to split the bill evenly. Each person paid $10. What was the total bill?

Evaluate each using the values given.

109) $6(p+m)$; use $m=1$, and $p=1$

110) $pm-p$; use $m=5$, and $p=5$

111) xy^2; use $x=6$, and $y=2$

112) $x+y-y$; use $x=4$, and $y=6$

113) y^2x; use $x=2$, and $y=3$

114) $y^2(y-x)$; use $x=3$, and $y=5$

115) $x+y(y-y)$; use $x=1$, and $y=4$

116) $\frac{x^2y}{6}$; use $x=6$, and $y=2$

117) $\frac{5}{5}+y+x$; use $x=6$, and $y=5$

118) $yx+y-x$; use $x=2$, and $y=6$