Name: _____

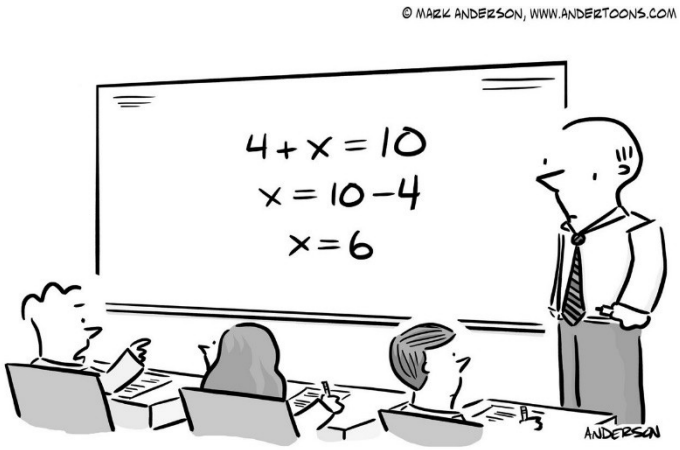
Date: _____

"Entering Pre-Algebra" Summer Math Packet

These exercises provide a thorough review of basic math topics in preparation for starting Pre-Algebra at Liberty Common Junior High School.

- This problem set should be completed and brought to class on the first full day of school for credit as the first homework assignment of the school year.
- No Calculator, show your work!
- Work problems on a separate sheet of paper and circle your answers.
- The correct answers are provided in the back so that you can check your work; you need to show your work to receive credit for the problem.

As you work through these problems, you most likely will come across topics that require a little review… you might even find some topics that you have completely forgotten! When this situation presents itself, get help. There are many resources available – websites, textbooks, friends, or siblings who are ahead of you in math, previous courses' notes, etc. – that can provide information to assist you.



"Hold on. When we learned Roman numerals, X was 10. Now it's 6. What's going on around here?!"

Have a great summer;
see you in August!

Dear incoming Pre-Algebra student,

I am so excited to have you in class next year. I know practicing math over the summer is not fun, but it is important to keep up all the skills you have worked so hard to learn this year. The skills you will practice in this packet are very important to have mastered without using a calculator. Please use scratch paper to show your work and staple all your scratch paper to this packet.

This completed packet will be your first official grade in the gradebook.

I'm looking forward to working hard, learning, and having fun with you next year.

No calculator for any problems in this packet.

Have a great summer,

Mrs. Dille

PS: If you need help with the topics in the packet or want to get a jump-start learning pre-algebra, I recommend the following tutorial websites. Please get your parents' permission before going to either of these sites!

https://www.mathantics.com

https://www.khanacademy.org/math/get-ready-for-7th-grade

No Calculator - show your work on scratch paper

Name_____

Pre-Algebra Summer Math Packet

Date_____ Period____

Round each number to the place value indicated.

1) 86,747.8; ones

2) 85,342,188; hundred thousands

3) 996,429.857; ones

4) 57.272; tenths

5) 421; hundreds

6) 29,726; thousands

Write the place vlaue name of the underlined digit.

7) 9<u>0</u>1.127

8) 6.8<u>3</u>487

9) 4<u>2</u>.856

10) <u>6</u>,138,962

Circle the word form of the numeral.

11) 73,407.001

A) seventy-three thousand, four hundred seven and one thousandth
B) seventy-three million, four hundred seven thousand, one
C) seventy thousand, four hundred seven and one thousandth
D) seventy-three thousand, four hundred seven and six thousandths

12) 740,031.003

A) seven hundred eighty thousand, thirty-one and three thousandths
B) seven hundred forty thousand, thirty-one and three thousandths
C) seven million, four hundred thousand, thirty-one and three thousandths
D) seven hundred forty thousand, thirty-two and three thousandths

13) 98,860.733

A) nine thousand, eight hundred sixty and seven hundred thirty-three thousandths
B) nine hundred eighty thousand, eight hundred sixty and seven hundred thirty-three thousandths
C) ninety-eight thousand, eight hundred sixty and seven hundred thirty-three thousandths
D) nine thousand, eight hundred eighty and seven hundred thirty-three thousandths

14) 42,050.074

A) four thousand, fifty and seventy-four thousandths
B) forty-two thousand, fifty and seventy-four thousandths
C) forty-two thousand, seven hundred fifty and seventy-four thousandths
D) forty-two thousand, fifty and seventy-four hundredths

Write each as a numeral.

15) thirty-nine thousand, six hundred ninety-one and four hundredths

16) five thousand, three hundred seventy and forty-nine hundredths

17) ten thousand, six hundred ninety-six and five hundredths

18) four thousand, fifty-three and three hundredths

Find each sum, answer in simplest form.

19) $1+\frac{1}{3}$

20) $2+\frac{1}{6}$

21) $\frac{8}{11}+\frac{1}{2}$

22) $\frac{5}{6}+\frac{19}{11}$

23) $\frac{7}{6}+\frac{2}{3}$

24) $\frac{7}{10}+\frac{11}{10}$

25) $1+\frac{3}{4}$

26) $2+\frac{2}{3}$

27) $\frac{8}{9}+2\frac{1}{3}$

28) $1\frac{5}{7}+1\frac{1}{4}$

29) $2\frac{1}{5}+5\frac{4}{5}$

30) $5\frac{1}{2}+5\frac{1}{7}$

31) $5\frac{4}{5}+6\frac{1}{7}$

32) $6\frac{6}{7}+4\frac{10}{11}$

33) $4\frac{7}{11}+3\frac{1}{2}$

34) $1\frac{7}{10}+\frac{1}{4}$

Find each difference, answer in simplest form

35) $\frac{5}{3}-\frac{1}{2}$

36) $2-\frac{1}{2}$

37) $1-\frac{1}{3}$

38) $6-\frac{3}{5}$

39) $\frac{9}{5}-\frac{6}{5}$

40) $\frac{4}{3}-\frac{8}{7}$

41) $4\frac{3}{4}-3\frac{2}{5}$

42) $2\frac{1}{6}-\frac{1}{2}$

43) $3\frac{1}{6}-2\frac{1}{2}$

44) $8\frac{1}{4}-1\frac{1}{4}$

45) $3\frac{1}{3}-2\frac{2}{5}$

46) $4\frac{2}{3}-3\frac{5}{8}$

Find each product in simplest form

47) $\frac{4}{5} \times \frac{1}{2}$

48) $\frac{6}{5} \times \frac{8}{7}$

49) $\frac{7}{6} \times \frac{6}{5}$

50) $2 \times \frac{5}{4}$

51) $\frac{4}{7} \times \frac{1}{9}$

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

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

54) $\frac{3}{2} \times \frac{9}{7}$

55) $5\frac{1}{2} \times \frac{9}{10}$

56) $2\frac{1}{6} \times 2\frac{2}{3}$

57) $1\frac{5}{9} \times \frac{3}{5}$

58) $2\frac{5}{6} \times 3\frac{6}{7}$

59) $3\frac{6}{7} \times 2\frac{1}{5}$

60) $1\frac{3}{4} \times \frac{2}{5}$

61) $7\frac{9}{10} \times \frac{5}{9}$

62) $\frac{1}{4} \times \frac{3}{10}$

Find each quotient in simplest form

63) $\frac{7}{4} \div \frac{3}{8}$

64) $\frac{2}{3} \div \frac{4}{3}$

65) $2 \div \frac{1}{2}$

66) $\frac{9}{7} \div \frac{4}{5}$

67) $1 \div \frac{3}{2}$

68) $2 \div \frac{1}{3}$

69) $2\frac{1}{2} \div 1\frac{1}{3}$

70) $2\frac{1}{3} \div 3\frac{2}{5}$

71) $1\frac{1}{3} \div \frac{1}{4}$

72) $1\frac{1}{3} \div 1\frac{3}{4}$

Evaluate each expression.

73) $2.47 + 2.5$

74) $3.84 - 0.4$

75) $7.9 + 0.2$

76) $3.5 + 7.3$

77) $0.8 + 4.1$

78) $7.4 + 0.3$

79) $5.8 + 6.4$

80) $3.3 - 2.8$

Find each product.

81) 6.6×0.5

82) 4.9×2

83) 1.3×1.5

84) 8.4×1.7

85) 7.19×6.3

86) 8.82×1.5

87) 5.8×3.4

88) 3.81×2.3

Find each quotient.

89) $22.4 \div 1.6$

90) $4.8 \div 0.2$

91) $8 \div 1.6$

92) $6.4 \div 0.1$

93) $17.088 \div 0.4$

94) $5.8 \div 0.4$

95) $27.3 \div 0.4$

96) $21.6 \div 28.8$

Evaluate each expression using the order of operations

97) $(16 - 2) \div (15 - (15 - 14))$

98) $(42 \div (2 + 1) + 4) \times 5$

99) $(6 + 25 - 5) \div (15 - 13)$

100) $14 + (15 - 3) \div 6 - 4$

101) $(3 + 31 - 3 - 11) \div 10$

102) $(15 - 5)(12 - 6) + 9$

103) $(7 + 5) \times 9 + 44 \div 4$

104) $14 + 13 \times 6 - (5 - 2)$

Find each sum.

105) $(-23) + 6$

106) $8 + (-26)$

107) $37 + (-13)$

108) $49 + (-2)$

109) $(-40) + 36$

110) $(-20) + 41$

111) $(-20) + 8$

112) $25 + (-20)$

113) $18 + (-26)$

114) $(-24) + (-29)$

115) $(-29) + 10$

116) $(-7) + (-48)$

117) $39 + (-31)$

118) $(-44) + (-25)$

119) $(-49) + (-42)$

120) $28 + (-8)$

Find each difference.

121) $24 - 25$

122) $(-23) - (-13)$

123) $(-11) - 19$

124) $13 - 4$

125) $11 - 12$

126) $13 - (-1)$

127) $4 - (-18)$

128) $(-9) - 23$

129) $(-14) - (-4)$

130) $11 - 20$

131) $(-10) - 6$

132) $24 - 7$

133) $18 - 14$

134) $23 - 25$

135) $14 - (-4)$

136) $(-22) - 16$

Answers to Pre-Algebra Summer Math Packet

1) 86,748
2) 85,300,000
3) 996,430
4) 57.3
5) 400
6) 30,000
7) tens
8) hundredths
9) ones
10) millions
11) A
12) B
13) C
14) B
15) 39,691.04
16) 5,370.49
17) 10,696.05
18) 4,053.03
19) $\frac{4}{3}$
20) $\frac{13}{6}$
21) $\frac{27}{22}$
22) $\frac{169}{66}$
23) $\frac{11}{6}$
24) $\frac{9}{5}$
25) $\frac{7}{4}$
26) $\frac{8}{3}$
27) $3\frac{2}{9}$
28) $2\frac{27}{28}$
29) 8
30) $10\frac{9}{14}$
31) $11\frac{33}{35}$
32) $11\frac{59}{77}$
33) $8\frac{3}{22}$
34) $1\frac{19}{20}$
35) $\frac{7}{6}$
36) $\frac{3}{2}$
37) $\frac{2}{3}$
38) $\frac{27}{5}$
39) $\frac{3}{5}$
40) $\frac{4}{21}$
41) $1\frac{7}{20}$
42) $1\frac{2}{3}$
43) $\frac{2}{3}$
44) 7
45) $\frac{14}{15}$
46) $1\frac{1}{24}$
47) $\frac{2}{5}$
48) $\frac{48}{35}$
49) $\frac{7}{5}$
50) $\frac{5}{2}$
51) $\frac{4}{63}$
52) $\frac{4}{5}$
53) $\frac{15}{16}$
54) $\frac{27}{14}$
55) $4\frac{19}{20}$
56) $5\frac{7}{9}$
57) $\frac{14}{15}$
58) $10\frac{13}{14}$
59) $8\frac{17}{35}$
60) $\frac{7}{10}$
61) $4\frac{7}{18}$
62) $\frac{3}{40}$
63) $\frac{14}{3}$
64) $\frac{1}{2}$
65) 4
66) $\frac{45}{28}$
67) $\frac{2}{3}$
68) 6
69) $1\frac{7}{8}$
70) $\frac{35}{51}$
71) $5\frac{1}{3}$
72) $\frac{16}{21}$
73) 4.97
74) 3.44
75) 8.1
76) 10.8
77) 4.9
78) 7.7
79) 12.2
80) 0.5
81) 3.3
82) 9.8
83) 1.95
84) 14.28
85) 45.297
86) 13.23
87) 19.72
88) 8.763
89) 14
90) 24
91) 5
92) 64
93) 42.72
94) 14.5
95) 68.25
96) 0.75
97) 1
98) 90
99) 13
100) 12
101) 2
102) 69
103) 119
104) 89
105) −17
106) −18
107) 24
108) 47
109) −4
110) 21
111) −12
112) 5
113) −8
114) −53
115) −19
116) −55
117) 8
118) −69
119) −91
120) 20
121) −1
122) −10
123) −30
124) 9
125) −1
126) 14
127) 22
128) −32
129) −10
130) −9
131) −16
132) 17
133) 4
134) −2
135) 18
136) −38