Name
Period

CRT Review
PACKET \#1

1. Use the given number line and identify the point that represents the value $\mathbf{- 3}$.

A. $\mathbf{A}$
C. C
B. B
D. D
2. Which choice has the integers $\mathbf{- 3}, \mathbf{0}, \mathbf{- 2 , 6}$ ordered from least to greatest?
A. $6,0,-2,-3$
B. $-2,-3,0,6$
C. $6,0,-3,-2$
D. $-3,-2,0,6$
3. Simplify $|-7|$
A. 0
C. 7
B. -7
D. No Answer
4. Simplify $-9+6$
A. 15
B. $\mathbf{- 1 5}$
C. 3
D. -3
5. Simplify $-9+-6$
A. $\mathbf{- 1 5}$
B. 15
C. -3
D. 3
6. Simplify $5+\mathbf{8}$
A. 13
B. 3
C. -3
D. -13
7. Simplify $-9-(-6)$
A. 3
B. -3
C. 15
D. $\mathbf{- 1 5}$
8. Simplify -9-6
A. -3
B. 3
C. $\mathbf{- 1 5}$
D. 15
9. Simplify 6-9
A. 3
B. -3
C. 15
D. $\mathbf{- 1 5}$
10. Simplify 8-5
A. $\mathbf{- 3}$
B. 13
C. 3
D. -13
11. Would the following sum be positive, negative, or zero?

$$
-28+66
$$

A. positive
B. negative
C. zero
12. Would the following sum be positive, negative, or zero?

$$
-27+27
$$

A. positive
B. negative
C. zero
13. Would the following difference be positive, negative, or zero?

$$
-15-13
$$

A. positive
B. negative
C. zero
14. Simplify - $3 \cdot 4$
A. 7
B. -7
C. 12
D. $\mathbf{- 1 2}$
15. Simplify $(-8)(-7)$
A. 56
B. -56
C. 15
D. $\mathbf{- 1 5}$
16. Simplify $\frac{-18}{6}$
A. 3
B. -3
C. 12
D. $\mathbf{- 1 2}$
17. Simplify $14 /-2$
A. $\mathbf{- 1 2}$
B. 12
C. -7
D. 7
18. Simplify $24 \div-8$
A. -3
B. 3
C. $\mathbf{- 3 2}$
D. 32
19. Complete the statement by inserting the appropriate inequality sign.
$-18$ $\qquad$ -17
A. $<$
B. $=$
C. $>$
20. Complete the statement by inserting the appropriate inequality sign.

$$
-|-29| \quad|-29|
$$

A. $<$
B. $=$
C. $>$
21. Simplify $\mathbf{1 0}(5 y+3)$
A. $50 y+3$
B. $15 y+13$
C. $50 y+30$
D. $50 y+13$
22. Simplify $\mathbf{- 4}(\mathbf{2 x + 1})$
A. $-8 x-4$
B. $-8 x-3$
C. $-8 x-5$
D. $-8 x+1$
23. Simplify $5 w+3+w$
A. $9 w$
B. $6 w+3$
C. $5 w+3$
D. $8 \boldsymbol{w}$
24. Simplify $12 y-4-2 y$
A. $14 y-4$
B. $14 y$
C. $6 y$
D. $10 y-4$
25. Simplify $\mathbf{4 + 2 0 \div 5 \cdot 2}$
A. 12
B. 16
C. 6
D. 32
26. Simplify $6-[3+(2 \cdot 3)]$
A. $\mathbf{- 3}$
B. 3
C. $\mathbf{- 2}$
D. 15
27. Evaluate $\boldsymbol{c}+|\mathbf{4}-\boldsymbol{c}|$ for $\boldsymbol{c}=\mathbf{1 7}$
A. 30
B. 48
C. 4
D. 20
28. Evaluate $\frac{w}{b-y}$
for $b=14, w=20, y=9$
A. 15
B. 100
C. 5
D. 4
29. Which property is being displayed?

$$
-14 \cdot 8=8 \cdot-14
$$

A. Associative Property
B. Commutative Property
C. Identity Property of Addition
D. Identity Property of Multiplication
30. Which property is being displayed?

$$
5+(3+11)=(5+3)+11
$$

A. Associative Property
B. Commutative Property
C. Identity Property of Addition
D. Identity Property of Multiplication
31. Identify the place value of the underlined digit: 43.95
A. hundredths
C. ones
B. tenths
D. tens
32. Round to the nearest hundredth: $\mathbf{2 3 . 6 9 5}$
A. $\mathbf{2 3 . 6 9}$
B. 24
C. 23.60
D. 23.70
33. Which fraction shows $\frac{\mathbf{6 0}}{\mathbf{7 0}}$ in lowest terms?
A. $\frac{60}{7}$
B. $\frac{6}{7}$
C. $\frac{6}{70}$
D. $\frac{12}{14}$
34. Which fraction shows $\frac{\mathbf{1 4}}{\mathbf{3 5}}$ in lowest terms?
A. $\frac{7}{18}$
B. $\frac{2}{5}$
C. $\frac{1}{2}$
D. $\frac{2}{3}$
35. Convert the fraction to a decimal, rounding to the nearest hundredth when necessary. $\frac{3}{4}$
A. 3.4
B. 0.75
C. 0.34
D. 12.0
36. Change to a percent: $\frac{15}{4}$
A. $\mathbf{3 7 5 \%}$
B. $\mathbf{3 . 7 5 \%}$
C. $\mathbf{3 7 . 5 \%}$
D. $\mathbf{0 . 0 3 7 5 \%}$
37. Change to a percent: $\mathbf{0 . 5 6 2}$
A. $\mathbf{5 6 2 \%}$
B. $\mathbf{0 . 0 5 6 2 \%}$
C. $\mathbf{5 6 . 2 \%}$
D. $\mathbf{5 . 6 2 \%}$
38. Convert $\mathbf{0 . 1 2}$ to a simplified fraction
A. $\frac{12}{100}$
B. $\frac{6}{50}$
C. $\frac{3}{25}$
D. $\frac{6}{5}$
39. Convert the fraction to a decimal, rounding to the nearest hundredth when necessary.

$$
\frac{2}{3}
$$

A. 6.0
B. 0.23
C. 2.3
D. 0.67
40. Convert the percent to a decimal: $\mathbf{5 7 \%}$
A. 5.7
B. 57.0
C. 0.57
D. $\mathbf{0 . 0 5 7}$
41. Convert the percent to a simplified fraction: $127 \%$
A. $\frac{127}{1000}$
B. $\frac{100}{127}$
C. $\frac{63}{50}$
D. $\frac{127}{100}$
42. Convert the fraction to a percent, rounding to the nearest hundredth when necessary.

$$
\frac{2}{5}
$$

A. $\mathbf{2 5 \%}$
B. $\mathbf{4 0 \%}$
C. 0.4
D. $\mathbf{2 5 0 \%}$
43. Change to a percent: $\mathbf{1 . 2 5}$
A. $\mathbf{1 2 5 \%}$
B. $\mathbf{1 2 5 0 0 \%}$
C. $\mathbf{0 . 0 1 2 5 \%}$
D. $\mathbf{1 . 2 5 \%}$
44. Compare: $6.11 \square 6.01$
A. $<$
B. $>$
C. =
45. Compare: $\frac{\mathbf{5}}{\mathbf{8}} \square \frac{\mathbf{1 1}}{13}$
A. $<$
B. $>$
C. $=$
46. Change to a decimal: $\mathbf{1 7 . 5 \%}$
A. 17.5
B. 0.175
C. 1.75
D. 175
47. Order from greatest to least:
5.71, 5.68, 5.79, 5.6
A. 5.6, 5.68, 5.71, 5.79
B. $5.68,5.6,5.71,5.79$
C. $\mathbf{5 . 7 9}, 5.71,5.68,5.6$
D. 5.79, 5.71, 5.6, 5.68
48. Order from greatest to least:

$$
\frac{3}{8}, \frac{7}{8}, \frac{1}{2}, \frac{1}{4}
$$

A. $\frac{7}{8}, \frac{3}{8}, \frac{1}{4}, \frac{1}{2}$
B. $\frac{7}{8}, \frac{1}{2}, \frac{\mathbf{3}}{\mathbf{8}}, \frac{\mathbf{1}}{\mathbf{4}}$
C. $\frac{1}{2}, \frac{1}{4}, \frac{3}{8}, \frac{7}{8}$
D. $\frac{1}{4}, \frac{3}{8}, \frac{1}{2}, \frac{7}{8}$
49. Order from least to greatest:

$$
\frac{1}{2}, 75 \%, 0.115, \frac{1}{4}
$$

A. $75 \%, \frac{1}{2}, \frac{1}{4}, 0.115$
B. $\frac{1}{2}, \frac{1}{4}, 0.115,75 \%$
C. $\frac{1}{4}, 0.115,75 \%, \frac{1}{2}$
D. $0.115, \frac{1}{4}, \frac{1}{2}, 75 \%$
50. Order from least to greatest:

$$
1.25, \frac{1}{8}, 0.27,25 \%
$$

A. $\frac{1}{8}, 25 \%, 0.27,1.25$
B. $\frac{\mathbf{1}}{\mathbf{8}}, \mathbf{0 . 2 7}, \mathbf{1 . 2 5}, \mathbf{2 5 \%}$
C. $1.25,0.27,25 \%, \frac{1}{8}$
D. $0.27, \frac{1}{8}, 1.25,25 \%$
51. Simplify $\mathbf{5}(\boldsymbol{x}+4)$
A. $20 x$
B. $5 x+4$
C. $5 x+9$
D. $5 x+20$
52. Solve the following.

$$
-20+x=5
$$

A. $\mathbf{- 2 5}$
B. $\mathbf{- 1 5}$
C. 25
D. $\mathbf{- 1 0 0}$
53. Simplify $|-9|$
A. -9
B. 9
C. 0
D. -18
54. $3 \frac{1}{3}+\frac{8}{9}$
A. $3 \frac{9}{12}$
B. $\frac{19}{6}$
C. $\frac{38}{9}$
D. $\frac{3}{4}$
55. Round to the nearest hundred: $\mathbf{3 , 6 2 1 . 5 7 3}$
A. 3,600
C. 36
B. 3,700
D. 3,621.57
56. Solve $\frac{x}{6}+10=25$
A. 15
B. 210
C. 5.8
D. 90
57. Which property is being displayed?

$$
5+(8+10)=(5+8)+10
$$

A. Associative Property
B. Commutative Property
C. Identity Property of Addition
D. Identity Property of Multiplication
58. $\frac{4}{3} \cdot \frac{6}{7}$
A. $\frac{8}{7}$
B. 1
C. 24
D. $\frac{12}{5}$
59. Solve the following.

$$
-3 x=36
$$

A. $-\mathbf{3 3}$
B. 33
C. 39
D. $\mathbf{- 1 2}$
60. Solve $-2 x+1+7 x=11$
A. -2
B. $\mathbf{- 1 . 1}$
C. 2
D. 1.1
61. Order from least to greatest:

$$
\frac{1}{2}, 75 \%, 0.115, \frac{1}{4}
$$

A. $75 \%, \frac{1}{2}, \frac{1}{4}, 0.115$
B. $\frac{1}{2}, \frac{1}{4}, \mathbf{0 . 1 1 5}, 75 \%$
C. $\frac{1}{4}, 0.115,75 \%, \frac{1}{2}$
D. $0.115, \frac{1}{4}, \frac{1}{2}, 75 \%$
62. Solve the following: $x+4 \geq 9$
A. $x \geq 5$
B. $x \geq 13$
C. $x \leq 5$
D. $x \leq 13$
63. Simplify $-11+6$
A. $\mathbf{- 1 7}$
B. -5
C. 5
D. 17
64. Solve $2 x-18<4$
A. $x>11$
B. $x>-7$
C. $x<11$
D. $x<-7$
65. $\frac{1}{5} \div \frac{3}{7}$
A. $\frac{7}{15}$
B. $\frac{3}{35}$
C. $\frac{35}{3}$
D. $\frac{15}{7}$
66. Evaluate $3 m+p \quad$ if $m=4$ and $p=3$
A. 10
B. 13
C. 15
D. 36
67. $\frac{3}{5}+\frac{1}{5}$
A. $\frac{2}{5}$
B. $\frac{4}{5}$
C. $\frac{4}{10}$
D. $\frac{3}{5}$
68. Simplify $9 \boldsymbol{h}+3-4 \boldsymbol{h}$
A. $5 h+3$
C. 13h-3
B. $13 h+3$
D. $5 h-3$
69. Order the following from least to greatest.

$$
\frac{5}{6}, 0.0998, \frac{4}{5}, 0.795
$$

A. $0.0998, \frac{4}{5}, 0.795, \frac{5}{6}$
B. $0.0998,0.795, \frac{4}{5}, \frac{5}{6}$
C. $\frac{5}{6}, \frac{4}{5}, 0.795,0.0998$
D. $\frac{5}{6}, 0.798, \frac{4}{5}, 0.0998$
70. Solve the following.

$$
x+5.6=0.2
$$

A. $\mathbf{- 5 . 4}$
B. 5.4
C. $\mathbf{- 3 . 6}$
D. 5.8
71. Simplify -7-5
A. 12
B. $\mathbf{- 2}$
C. 2
D. $\mathbf{- 1 2}$
72. $\frac{7}{4}-\frac{1}{4}$
A. $\frac{5}{4}$
B. 2
C. $\frac{3}{2}$
D. $-\frac{6}{4}$
73. Solve $2 x-2=-6$
A. 4
B. 2
C. -4
D. -2
74. Simplify $\mathbf{4 + 2 ( 1 3 - 6 )}$
A. 42
B. 56
C. 16
D. 18
75. Solve $-7 x+3 x-8=24$
A. 8
B. 3.2
C. -8
D. -3.2
76. Convert $\frac{\mathbf{4}}{\mathbf{5}}$ to a decimal.
A. 0.8
B. 0.45
C. 0.4
D. 0.08
77. Solve the following.

$$
-x=311
$$

A. $\mathbf{- 3 1 0}$
B. $\mathbf{- 3 1 1}$
C. $\mathbf{- 3 1 2}$
D. 311
78. Solve $\frac{x}{8}-3 \geq-1$
A. $x \geq-32$
B. $x \geq 16$
C. $x \leq-32$
D. $x \leq 16$
79. $\frac{3}{8}-\frac{1}{6}$
A. 1
B. $\frac{1}{12}$
C. $\frac{1}{2}$
D. $\frac{5}{24}$
80. Solve $\frac{\boldsymbol{x}}{3}-3=7$
A. 12
B. 3.3
C. 30
D. 1.3
81. What is the correct inequality for the given graph?

A. $x>-5$
B. $x<-5$
C. $x \geq-5$
D. $x \leq-5$
82. Evaluate $\frac{x y}{z}$ if $x=4, y=6$ and $z=3$
A. 72
B. 3.3
C. 8
D. 15.3
83. Simplify (-4)(6)
A. 2
B. $-\mathbf{2 4}$
C. 24
D. 10
84. Solve the following:

$$
x-6=15
$$

A. 9
B. $\mathbf{- 2 1}$
C. 21
D. -9
85. Simplify $\frac{1+8(-2)}{6-6 \div 2}$
A. -5
B. $\frac{-17}{3}$
C. -6
D. $\frac{-16}{3}$
86. Convert $3 \frac{\mathbf{2}}{\mathbf{4}}$ to an improper fraction.
A. $\frac{12}{4}$
B. 12
C. $\frac{10}{4}$
D. $\frac{14}{4}$
87. Change to a percent: $\frac{15}{4}$
A. $\mathbf{1 5 . 4 \%}$
B. $\mathbf{3 7 5 \%}$
C. $\mathbf{3 . 7 5 \%}$
D. $\mathbf{2 6 . 7 \%}$
88. Solve the following:

$$
100=\frac{x}{2}
$$

A. 50
B. 200
C. 102
D. 98
89. Solve $5(x-7)=90$
A. 16.6
B. 11
C. 25
D. 19.4
90. $\frac{5}{9} \cdot \frac{-2}{3}$
A. $\frac{-10}{27}$
B. $\frac{1}{4}$
C. $\frac{-10}{3}$
D. $\frac{-5}{6}$
91. Solve $\frac{x}{-7}+5<4$
A. $x>-7$
B. $x>7$
C. $x<-7$
D. $x<7$
92. Simplify $\frac{\mathbf{1 5}}{-5}$
A. -3
B. 3
C. $\frac{1}{3}$
D. $-\frac{1}{3}$
93. Convert $\mathbf{4 5 \%}$ to a simplified fraction.
A. $\frac{45}{1000}$
C. $\frac{9}{20}$
B. 4.5
D. $\frac{9}{100}$
94. $4 \div \frac{5}{11}$
A. $\frac{11}{20}$
B. $\frac{44}{5}$
C. $\frac{20}{11}$
D. $\frac{5}{44}$
95. Evaluate.

$$
-3+|-6+2|-7
$$

A. 6
C. -6
B. -14
D. 14
96. Which of the following graphs correctly shows $\mathbf{3} \leq \boldsymbol{x}$ ?

97. Solve $-4 x-5=-21$
A. -6.5
B. -4
C. 6.5
D. 4
98. Is 763 divisible by 3 ?
A. Yes, because the number ends in a 3 .
B. No, because $7+6+3=16$
C. Yes, because $6+3=9$
D. No, because $\mathbf{3}$ doesn't go into 7 evenly.
99. Solve the following:

$$
\frac{3}{4}=x+\frac{1}{4}
$$

A. $\frac{2}{8}$
B. $\frac{1}{2}$
C. $\frac{3}{8}$
D. $\frac{4}{4}$
100. Which fraction shows $\frac{9}{18}$ in lowest terms?
A. $\frac{1}{9}$
B. 2
C. 9
D. $\frac{1}{2}$
101. You flip a coin multiple times. What is the probability of the following:

## P(tails, tails, tails)

A. $\frac{1}{6}$
B. $\frac{1}{2}$
C. $\frac{1}{8}$
D. $\frac{3}{8}$
102. Jason's quiz scores were
$18,16,24,17,21,26$, and 24.
What was his mean score? (Round your answer to the nearest tenth if necessary.)
A. 10
B. 21
C. 20.9
D. 24
103. If your restaurant bill is $\$ 36.00$ and you want to tip $15 \%$, what would be the amount of the tip?
A. $\mathbf{\$ 2 . 4 0}$
B. $\mathbf{\$ 5 . 4 0}$
C. $\$ 1.50$
D. $\$ 41.40$
104. Find the missing side.

A. 81.2
B. 124.8
C. 278.7
D. 166.2
105. You are making cookies that call for $\frac{\mathbf{2}}{\mathbf{3}}$ cup of shortening. You want to triple the batch of cookies. How much shortening will you need to make the three batches of cookies?
A. 3 cups
B. 2 cups
C. $3 \frac{2}{3}$ cups
D. $1 \frac{1}{3}$ cups
106. Jenny did a survey and found that 3 out of 5 people had green eyes. This is an example of what type of probability?
A. Theoretical
C. Experimental
B. Complement
D. Neither
107. What is the $1^{\text {st }}$ quartile and $3^{\text {rd }}$ quartile found from the data:
$10,8,9,1619,15,20,16,21,22,19$
A. $\mathbf{1 0}, \mathbf{2 0}$
C. $12.5,18.5$
B. 9,21
D. $12.5,19.5$
108. The ratio of boys to girls in Nathan's English class is 3:4. If there are 16 girls in the class, how many boys are there?
A. 9
B. 20
C. 24
D. 12
109. Mark gets 300 votes in an election and learns that this is $40 \%$ of the total vote. How many votes were cast?
A. 120
B. 13
C. 340
D. 750
110. Find the UNIT RATE for the given situation. If necessary, round to the nearest hundredth.

For each student, Alpine School district spends about $\$ 5000$ for 180 school days.
A. $\frac{25 \text { dollars }}{9 \text { days }}$
B. 27.78 dollars per day
C. $\frac{5000 \text { dollars }}{180 \text { days }}$
D. 27.78 days per dollar
111. Solve $5(x-7)=90$
A. 16.6
B. 11
C. 25
D. 19.4
112. The scale of a map is 3 inches : 100 miles. Two cities are 9.5 inches apart on the map. Find the actual distance between the cities.
A. 316.7 mi
B. $\mathbf{9 5 0} \mathbf{~ m i}$
C. 31.6 mi
D. 0.285 mi
113. Frankie is buying a new Lego set. The Lego set costs $\$ 25$, but Frankie has a 20\% off coupon. How much will Frankie pay for the Lego set?
A. $\$ 20.00$
B. $\mathbf{\$ 5 . 0 0}$
C. $\$ \mathbf{3 0 . 0 0}$
D. $\mathbf{\$ 2 4 . 2 0}$
114. In the histogram below, how many students had less than 7 people in their family?

A. 8
B. 5
C. 3
D. 14
115. Solve $240 \div(-20) \cdot 4$
A. -3
B. $\mathbf{- 1 6}$
C. -24
D. -48
116. Which answer shows three possible solutions for the given inequality?

$$
x>-5
$$

A. $-6,-7,-8$
C. $-5,-4,-3$
B. $-5,-6,-7$
D. $-4,-3,-2$
117. You are buying a TV that is usually $\$ 1,200$. It is on sale for $\$ 1,000$. Find the percent of change.
A. $\mathbf{6 0 0 \%}$
B. $\mathbf{1 2 0 \%}$
C. $\mathbf{1 6 . 7 \%}$
D. $\mathbf{2 0 \%}$
118. Solve $\frac{m}{7.8}=\frac{13}{6}$
A. 16.9
B. 3.6
C. 0.06
D. 14.8
119. Solve the following.

$$
x+\frac{2}{3}=1
$$

A. $1 \frac{2}{3}$
B. $\frac{1}{2}$
C. $\frac{5}{3}$
D. $\frac{1}{3}$
120. You are choosing Skittles from a bag. There are 7 red, 6 orange, 4 yellow, 2 green and 3 purple. If you choose a Skittle then do replace the first Skittle before choosing another, find the probability of the following:

P (purple, yellow)
A. $\frac{7}{484}$
B. $\frac{3}{22}$
C. $\frac{3}{121}$
D. $\frac{2}{11}$
121. You are choosing Skittles from a bag. There are 7 red, 6 orange, 4 yellow, 2 green and 3 purple. If you choose a Skittle, eat the first Skittle and then choose a second, find the probability of the following:
P(green, red)
A. $\frac{1}{33}$
B. $\frac{9}{22}$
C. $\frac{7}{242}$
D. $\frac{9}{242}$
122. Solve the following inequality: $-2 x>18$
A. $x<-9$
B. $x>-9$
C. $x>20$
D. $x<20$
123. The points you scored in the last seven basketball games are listed below. Which statement about the data is false?
$11,15,6,10,7,22,6$
A. The range is $\mathbf{1 1}$
B. The median is $\mathbf{1 0}$
C. The mode is 6
D. The mean is $\mathbf{1 1}$
124. Rolling a 6 sided die, answer the following as a simplified fraction:

## P(complement of 3)

A. $\frac{1}{3}$
B. $\frac{1}{2}$
C. $\frac{1}{4}$
D. $\frac{5}{6}$
125. $\quad 18$ qt $=$ $\qquad$ gal
A. 9 gal
B. 72 gal
C. 36 gal
D. 4.5 gal
126. Evaluate $2 \cdot 6+4(9-2)$
A. 40
B. 18
C. 36
D. 112
127. What is the minimum, median, and maximum found from the data:
$10,8,9,1619,15,20,16,21,22,19$
A. $10,15,19$
C. 8, 18, 22
B. 8, 16, 22
D. $10,17.5,19$
128. Solve $12 x-3 \geq 21$
A. $x \leq 2$
B. $x \leq 1.5$
C. $x \geq 2$
D. $x \geq 1.5$
129. 7.5 is $15 \%$ of what?
A. 50
B. 1.13
C. 200
D. 0.5
130. Utah license plates have 3 numbers followed by 3 letters. How many different license plates of this type are possible?
A. $\mathbf{1 7 , 5 7 6 , 0 0 0}$ combinations
B. 9 combinations
C. 2340 combinations
D. $11,232,000$ combinations

