Name_____ Date_____

Integers & Rational Number Review (Chapters 1 & 2)

Multiple Choice
Identify the choice that best completes the statement or answers the question.

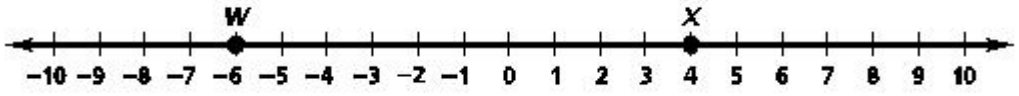
____ 1. When $a = -9$ and $b = -6$, which expression has a value of –3?
a. $a + b$
b. $|a + b|$
c. $a - b$
d. $|a - b|$

____ 2. You record the daily low temperatures for four days at a ski lodge. What is the mean low temperature?

Low Temperature	
Thursday	–3°C
Friday	–6°C
Saturday	–5°C
Sunday	–2°C

a. –16°C
b. –4°C
c. 2.5°C
d. 4°C

____ 3. Two points are plotted on the number line below.



Which of the following has the **greatest** value?
a. $W - X$
b. $X - W$
c. $W + X$
d. $X \bullet W$

____ 4. The temperature at 6:00 P.M. was 15°C The temperature dropped 2°C per hour. What was the temperature at 4:00 A.M.?
a. –5°C
b. –1°C
c. 1°C
d. 5°C

____ 5. The table shows the results of three plays in a football game. What is the net result of the three plays?

Football Game	
1st play	5 yards
2nd play	–9 yards
3rd play	12 yards

a. –16 yards
b. –8 yards
c. 8 yards
d. 12 yards

____ 6. What is the value of the expression below?

$|48 \div (-6)| + |-35 \div 7|$

a. –13
b. –3
c. 3
d. 13

Evaluate the expression when $a = -48$, $b = 4$, and $c = -3$.

____ 7. $c + b$
a. 1
b. –1
c. –7
d. 0

____ 8. $-50 - a$
a. 98
b. –2
c. –1
d. –98

____ 9. $b - 3$
a. –1
b. 7
c. 1
d. –7

____ 10. $18 \div c$
a. 6
b. –54
c. 54
d. –6

____ 11. $\frac{a \div b}{c}$
a. 4
b. –4
c. 7
d. 64

____ 12. $\frac{a}{3}$
a. 144
b. –144
c. –16
d. 16

____ 13. 10 – 24
a. –14
b. –34
c. 34
d. 14

Evaluate the expression.

____ 14. –7 + 5 – (–3)
a. 9
b. –15
c. 1
d. –5

____ 15. 10 – (–9) – 8
a. 11
b. 27
c. 9
d. –11

____ 16. $-3 \bullet (-2)^3$
a. –24
b. –18
c. 18
d. 24

____ 17. $(-3)^2$

a. –6
c. 6
b. –9
d. 9

____ 18. -8^2

a. 64
c. –64
b. –16
d. 16

____ 19. $-4^2 \bullet 6$

a. 96
c. –96
b. 48
d. –48

____ 20. $-8 - 10 \div 2 + 8$

a. 5
c. –9
b. –5
d. –1

____ 21. $-12 \div (-3) + (-9) \bullet (-6)$

a. 30
c. –6
b. 58
d. 61

____ 22. $2 \bullet (-5) \bullet (-8)$

a. 79
c. 80
b. –80
d. 83

____ 23. A manatee dives at a rate of 4 feet per second. What integer represents the change in the manatee's position after 20 seconds?

a. 80
c. –60
b. –80
d. –85

Divide, if possible.

____ 24. $\frac{40}{-8}$

a. –5
c. 5
b. $-\frac{1}{5}$
d. $\frac{1}{5}$

____ 25. $\frac{22}{0}$

a. undefined
c. 1
b. 22
d. 0

Find the mean of the integers.

____ 26. –12, –4, –11, –6, 4

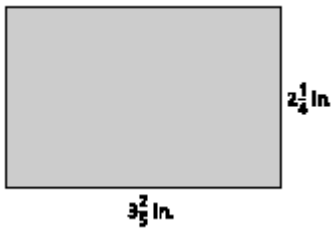
a. –6
c. –3.8
b. 5.8
d. –5.8

____ 27. Which of the following describes a correct method for finding the sum below?

$$-\frac{7}{2}+\frac{3}{4}$$

a. Write the sum of the numerators over the sum of the denominators. Simplify.
b. Rewrite using the LCD. Write the sum of the numerators over the sum of the denominators. Simplify.
c. Rewrite using the LCD. Write the sum of the numerators over the common denominator. Simplify.
d. Rewrite using the LCD. Write the difference of the numerators over the common denominator. Simplify.

____ 28. What is the area, in square inches, of the rectangle?



a. $5\frac{13}{20}$
b. $6\frac{1}{10}$
c. $7\frac{13}{20}$
d. $11\frac{3}{10}$

____ 29. Which of the following has the **greatest** value?

a. |4.4|
b. |–4.28|
c. $\left|-\frac{9}{2}\right|$
d. $\left|-4\frac{3}{5}\right|$

____ 30. A board is $6\frac{1}{2}$ feet long. You cut off a $1\frac{3}{4}$-foot piece and a $2\frac{2}{3}$-foot piece. How much of the original board is left?

a. $-2\frac{1}{2}$ feet
b. $-\frac{1}{6}$ foot
c. $2\frac{1}{12}$ feet
d. $4\frac{5}{12}$ feet

Write the decimal as a fraction or mixed number in simplest form.

____ 31. 0.35

a. $\frac{7}{200}$
b. $\frac{7}{20}$
c. $2\frac{6}{7}$
d. $-\frac{7}{20}$

____ 32. -1.74

a. $-17.\overline{25}$
c. $-\frac{50}{87}$
b. $1.\overline{37}$
d. $-1.\overline{37}$

Order the numbers from least to greatest.

____ 33. $-\frac{5}{7}, \frac{4}{5}, 1.3, -\frac{11}{2}, 0.1$

a. $0.1, -\frac{11}{2}, 1.3, \frac{4}{5}, -\frac{11}{2}$
c. $-\frac{11}{2}, -\frac{5}{7}, 0.1, \frac{4}{5}, 1.3$
b. $-\frac{11}{2}, -\frac{5}{7}, \frac{4}{5}, 0.1, 1.3$
d. $-\frac{5}{7}, -\frac{11}{2}, 0.1, \frac{4}{5}, 1.3$

Complete the statement using <, >, or =.

____ 34. $19.\overline{2}$ ___?___ $9\frac{1}{2}$

a. >
b. <
c. =

____ 35. -4.2 ___?___ $-4\frac{1}{5}$

a. >
b. =
c. <

____ 36. $-1\frac{11}{26}$ ___?___ $-1.\overline{13}\overline{5}$

a. =
b. <
c. >

Add. Write fractions in simplest form.

____ 37. $2.8 + (-1.981)$

a. –0.819
c. 0.819
b. 0.809
d. –4.781

____ 38. $43.\overline{12} + \left(-2\frac{3}{10}\right)$

a. $32\frac{1}{11}$
c. $1\frac{17}{60}$
b. 10
d. $5.\overline{53}\overline{60}$

____ 39. $-6.8 + 7.4$

a. 0.06
c. –14.2
b. 14.2
d. 0.6

Subtract. Write fractions in simplest form.

____ 40. $-3\frac{1}{3} - 2\frac{1}{2}$

a. $-5\frac{5}{6}$
c. $5\frac{5}{6}$
b. $-\frac{5}{6}$
d. $\frac{5}{6}$

____ 41. $2.735 - (-6.181)$

a. 8.925
c. 8.916
b. 3.446
d. –3.446

____ 42. $-\frac{1}{2} - \left(-\frac{1}{2}\right)$

a. –4
c. 0
b. –1
d. $\frac{1}{2}$

____ 43. $-9\frac{1}{2} - 8\frac{3}{10}$

a. $17\frac{4}{5}$
c. $\frac{3}{4}$
b. $1\frac{1}{5}$
d. $-17\frac{4}{5}$

Divide. Write your answer in simplest form.

____ 44. $41.31 \div (-4.5)$

a. –0.109
c. 9.18
b. 45.81
d. –9.18

____ 45. $-\frac{2}{7} \div \frac{5}{9}$

a. $\frac{18}{35}$
c. 1
b. $-\frac{10}{63}$
d. $-\frac{18}{35}$

____ 46. $-9\frac{1}{5} \div \left(-6\frac{1}{5}\right)$

a. $1\frac{15}{31}$
c. 1
b. $57\frac{1}{25}$
d. $-1\frac{21}{25}$

Multiply. Write your fractions in simplest form.

____ 47. $\dot{4}\,\dot{7}\left(-\frac{2}{3}\right)$

a. $\dot{1}0\,\dot{6}3$

b. $\dot{8}\,21$

c. $-\dot{5}\,\dot{8}$

d. $-\dot{8}\,\dot{2}1$

____ 48. $-3(0.96)$

a. 3.125

b. –3.13

c. –2.88

d. 2.88

Integers & Rational Number Review (Chapters 1 & 2)
Answer Section

MULTIPLE CHOICE

1. C
2. B
3. B
4. A
5. C
6. D
7. A
8. B
9. C
10. D
11. A
12. C
13. A
14. C
15. A
16. D
17. D
18. C
19. C
20. B
21. B
22. C
23. B
24. A
25. A
26. D
27. C
28. C
29. D
30. C
31. B
32. D
33. C
34. C
35. B
36. B
37. C
38. C
39. D
40. A
41. C
42. C
43. D
44. D
45. D
46. A
47. D
48. C