Module Test B

Module 3

Evaluate each.

1. -13 × (-9)
117

2. -67 – (-45)
-22

3. -18 + (-13)
-31

4. 119 ÷ (-7)
-17

5. 361 ÷ |-19|
19

6. |-27| + (-29)
-2

Write a negative or positive number that represents each statement.

7. A company offers a $20 rebate on a 50-pack of CDs. **-20**

8. The Jayhawks were winning by 11 goals. **+11**

9. There was a 6°C rise in temperature. **+6**

Circle the correct answer for each problem.

10. Which set of numbers is in order from least to greatest?
    a. -2, 0, -1, 2   **b.** 2, 0, -1, -2   **c.** -2, -1, 0, 2   **d.** 0, -2, -1, 2
                                                              -2, -1, 0, 2

11. Which set of numbers is in order from greatest to least?
    a. -3, -4, 0, -6   **b.** -6, -4, -3, 0,   **c.** -3, 0, -4, -6   **d.** 0, -3, -4, -6
                                                                                          0, -3, -4, -6

12. Which of the following has the greatest value?
    a. -|-19| **b.** -18   **c.** -(-19)   **d.** |-18|
                                              -(-19)

13. Which of the following has the least value?
    a. |-2| **b.** -(-3)   **c.** -|-2| **d.** -|3|
                                              -|3|

14. How many zero pairs have to be placed in the workspace to subtract negative three from negative four using counters?

    a. 0   **b.** 1   **c.** 3   **d.** 4

    0

15. Evaluate $|62 + (-71)|$.

    a. 9   **b.** 62   **c.** 71   **d.** 133

    9

16. Evalutate $14 + (-14) + (-9)$.

    a. -14   **b.** -9   **c.** 9   **d.** 14

    -9

17. Name the integer which when subtracted from six will equal 13.

    a. -19   **b.** -7   **c.** 7   **d.** 19

    -7

18. Evaluate $(-3)(-2)(-4) + 5$.

    a. -29   **b.** -19   **c.** 19   **d.** 29

    -19

19. To add $6 + (-3)$ on a number line,

    a. start at -3 and move right 6 units.   **b.** start at -3 and move left 6 units.   **c.** start at 6 and move right 3 units.   **d.** start at 6 and move left 3 units.

    d

20. Water is draining out of a pond at a rate of 25 gallons per hour. Currently, the pond has 200 gallons of water. How many gallons of water did the pond have three hours ago?

    a. 125 gallons   b. 175 gallons   c. 225 gallons   d. 275 gallons

    275 gallons

21. Which has the greatest value?

    a. $(-18)(3)$ **b.** $(-18) \div 3$ **c.** $-18 + 3$ **d.** $-18 - 3$

    $(-18) \div 3$

22. $|-6| \times 17$ has the same value as:

    a. $|-6 \times 17|$ **b.** $-|6| \times 17$ **c.** $(-6) \times 17$ **d.** $(-6) \times |-17|$

    $|-6 \times 17|$

Answer the questions in the space provided.

23. Find all possible pairs of integers that have a quotient of negative seven, and when the smaller integer is subtracted from the larger integer, the difference is 32.
28 and -4; 4 and -28

24. In an air show, a plane keeps ascending and descending. When the plane is in the same horizontal line as the top of a control tower, it is considered to be at zero feet. The plane ascends 25 feet per second for eight seconds from the top of the control tower. Then, the plane descends 30 feet per second for nine seconds. Where is the plane after 17 seconds? Explain how you got your answer.

Possible answer: rate x time = distance The ascending rate is +25 ft/sec. The descending rate is -30 ft/sec. Both times are positive. Add together the distances up and down.
(25)(8) + (-30)(9)
200 + (-270)
-70
70 feet below the horizontal line of the control tower

25. Explain how to subtract -4 – (-6) using counters.

Possible answer: I put four negative counters in the workspace. I need to remove six negative counters and add two zero pairs. There are now six negative counters and two positive counters. I then remove the six negative counters. There are two positive counters in the workspace. So, -4 – (-6) = 2.