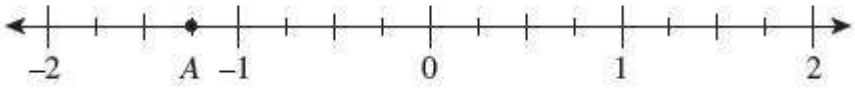
Unit 1 Test (Please Do Not Write On Test)

1. **A bookcase in a classroom contains textbooks that weigh 0.8 pound each. The bookcase alone weighs 32.2 pounds. If the total weight of the books and the bookcase is 41.8 pounds, how many books are in the bookcase?**

   a) 12 b) 16 c) 24 d) 25

2. **Which of the following best represents the location of point *A* on the number line shown below?**



a) $-2\frac{3}{4}$ b) $-2\frac{1}{4}$ c) $-1\frac{1}{2}$ d) $-1\frac{1}{4}$

3. **What is the multiplicative inverse of $2\frac{3}{5}$?**

   a) $\frac{13}{5}$ b) $\frac{5}{13}$ c) $2\frac{13}{5}$ d) $2\frac{5}{13}$

4. **Betty is making pizza using pepperoni, mushrooms, and black olives. She uses 4 fewer pieces of pepperoni than black olives and 2 times as many black olives as mushrooms. She uses 18 mushrooms on the pizza. How many pieces of pepperoni will she use?**

   a) 18 b) 25 c) 32 d) 40

5. **Which of the following shows the numbers ordered from greatest to least?**

   a) 0.32, 0.004, 0.07, 0.6 b) 0.6, 0.32, 0.07, 0.004

   c) 0.6, .004, 0.07, 0.32 d) 0.004, 0.32, 0.07, 0.6

6. **Edwina bought a book for $17. She now has $63. How much money did Edwina have before she bought the book?**

   a) $21 b) $45 c) $65 d) $80

7. **The cost of the field trip bus is to be shared equally by all 35 students on the bus. If the bus costs $56.00, how much does each student have to pay?**

   a) $1.30 b) $1.40 c) $1.60 d) $1.70

8. Maria ate one-sixth of a banana. What portion of the banana did she eat?

a) 0.016 banana b) 0.166 banana c) 1.6 banana d) 1.67 banana

9. At the fall festival the tennis team is selling hamburgers for $2.50, hotdogs for $2.00 and drinks for $.75. Half of the money raised will go towards the purchase of team uniforms. If they sell 21 hamburgers, 34 hotdogs, and 65 drinks, how much money will they have to put towards the purchase of uniforms?

a) $64.63 b) $74.63 c) $84.63 d) $94.63

10. In January Mary starts off with $65 in her checking account. During the month she deposits $329.58 and writes checks totaling $85.77. At the end of the month she decides to take half of the money left in the account and deposit it into her savings account. How much did she deposit in her savings account?

a) $143.94 b) $167.83 c) $123.06 d) $154.41

11. Two consecutive numbers add up to 97. What are the two numbers?

a) 46 and 47 b) 47 and 48 c) 48 and 49 d) 49 and 50

12. Where would $|9|$ be located on the number line?

a) 9 units to the right of zero b) 9 units to the left of zero

c) 9 units to the left and right of zero d) 9 units from zero

13. Multiply.

-24 x -3

a) -72 b) 72 c) -62 d) 62

14. Marcus has $60 in his pocket. Joseph has twice as much as Marcus, Jenna has half as much as Marcus, and Sam has one-third as much as Marcus. Order the individuals based on the amount of money they have from greatest to least.

a) Sam, Jenna, Marcus, Joseph b) Jenna, Sam, Marcus, Joseph

c) Sam, Jenna, Joseph, Marcus d) Joseph, Marcus, Jenna, Sam

15. If the perimeter of a triangle measures 63 feet and the three sides are consecutive numbers, what are the side lengths?

a) 20, 21, and 22 b) 21, 22, and 23 c) 22, 23, and 24 d) 23, 24, and 25

16. Simplify.

-8.5 + 6.9 + (-2.4)

a) -4 b) 4 c) 4.3 d) -3.5

17. Two consecutive, even integers sum to 90. Find the smaller number

a) 42 b) 44 c) 46 d) 48

18. Last season, Ellen and Janet together won 32 tennis matches. Ellen won 6 more matches than Janet. How many matches did Ellen win?

a) 13 b) 16 c) 19 d) 25

19. A bottle of liquid dog vitamins indicates that a dog gets 2 drops of vitamins each day for every 5 pounds of body weight. How many drops of vitamins should a 30-pound dog get each day?

a) 2 b) 4 c) 8 d) 12

20. What is the value of $\left(-\frac{2}{5}\right)\left(-\frac{5}{6}\right) \div \left(\frac{5}{18}\right)$**?**

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

***Open-ended/Constructive Response (Write your answer and show your work on a separate sheet of paper to be turned in with your test)**

21. Evelyn is working with the following expressions.

$3 - 7 - (-5)$

$3 - |7 - (-2)|$

Part A

Show the expression $3 - 7 - (-5)$ on a number line. Explain how you could use the number line to arrive at the value of the expression.

Part B

Find the distance between 3 and -5 using absolute value. Show your work.

Part C

What is the value of $3 - |7 - (-2)|$? Show your work.

Part D

Evelyn said that if she rewrites the expression $3 - 7 - (-5)$ as $-3 + (-7) + 5$, the value would be -1. She made at least one error. Explain the error(s) that Evelyn made.