

Score : _____ out of 60 = _____ %

Show all your thinking.**Answers without appropriate supporting evidence receive little or no credit.**

Each problem is worth 3 points.

Write your work on your own paper or on a printed copy.

1. Evaluate: $-48 \div \sqrt{16} \times 2$

2. Simplify: $9x + \frac{2}{7} - x + \frac{4}{3}$

3. Evaluate the expression $-4x + 14y$ if $x = -3$ and $y = \frac{4}{7}$.

4. Solve: $2x + 12 = 4x - 10$

5. Solve: $18x + 15 = 5(2x + 1) - 2x$

6. Solve: $\frac{1}{3}x - 4 = \frac{2}{7}x$

7. Write an equation and then solve to answer the question:

Aaron works at a gym selling memberships. Each month, he earns \$500 as base salary and \$20 for each membership he sells that month. If he wants to earn \$2000 this month, how many memberships must he sell?

Equation:

Solution:

8. Solve the inequality:

$$-6(x + 4) \leq 18$$

9. Using the formula $r = \frac{d}{t}$, find d if $r = 70$ and $t = 5$.

10. Solve: $12x + 4y = 36$ for y .

11. Solve the proportion:

$$\frac{4}{5} = \frac{9}{n}$$

12. **Solve using a proportion:**

The dosage for a certain medication is 1.5 milliliters for a person weighing 50 pounds. How much medication should the nurse give a patient who weighs 175 pounds?

Proportion:

Solution:

13. **Translate and solve:**

26% of what number is 208?

14. Alex gave the delivery driver a \$12 tip for an \$80 food bill. What percent of the bill did Alex give as the tip?

15. Find the unknown coordinate so that $(-2, \underline{\quad})$ is a solution of the equation $4x - 5y = -13$.

16. For the line $6x - 4y = -24$, find the:

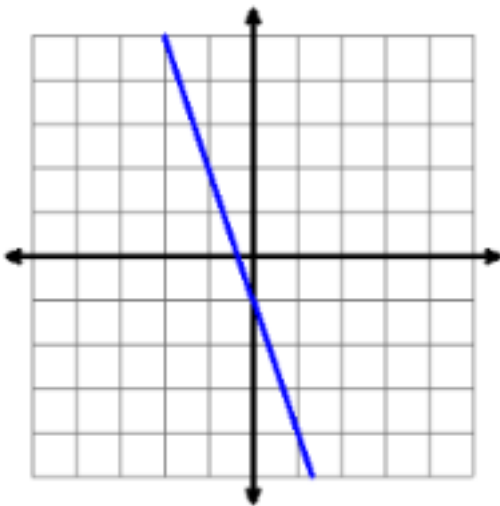
a. x-intercept

b. y-intercept

17. Determine the slope of the line that passes through the points $(-4, 2)$ and $(6, -3)$.

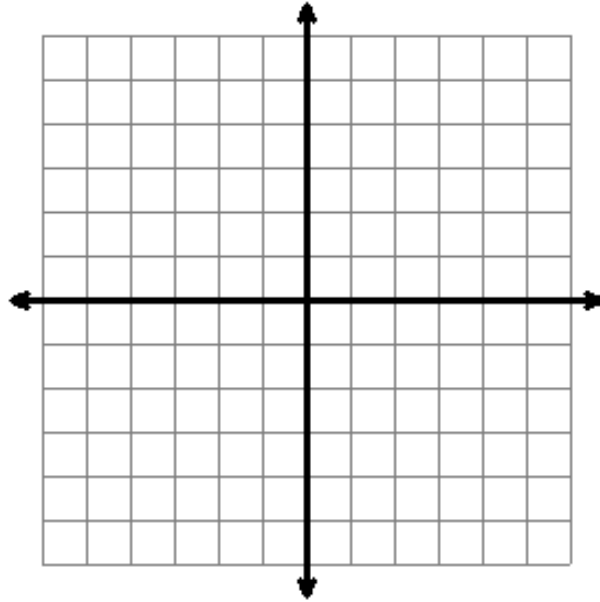
18. Write the equation of the line with slope -2 passing through the point $(1, -9)$.

19. Write the equation of the line graphed below. SHOW ALL YOUR THINKING.



20. Graph the line: $-2x + y = -4$

- You must **clearly** show **at least two** points on the line and show/explain how you found each.
- Your graph must be precise enough to see those points.



Using your scanning app (Notes, Adobe Scan, etc), take clear scans of each of your papers. Use the app to combine the separate pages into **one pdf file**.

Go back to the Blackboard test window and attach that one file **before the test window closes** (at the end of the 120 minutes).

If you have any issues, you must notify Mrs. Baranoski during or immediately after the test ends.

If the issue is with uploading your work, you must email the work to Mrs. Baranoski within 5 minutes after the test ends.