

Name: _____ Class: _____ Date: _____

ID: A

Summer 2016 Assignment - Gulf High School - Algebra 1, 1A/1B , Liberal Arts

Directions: Use your own paper to show ALL work for each problem. Label each problem and mark y final answers clearly by circling or putting a box around it. All work must be shown in order to recei credit. Write final answers on this packet.

1. Use a factor tree to write the prime factorization of 14.

Find the greatest common factor of the numbers.

2. 24 and 54
3. 6, 21, and 36

Find the least common multiple of the set of numbers.

4. 6 and 10
5. 4, 9, and 16

What is each product?

6. $(-6.8)^2$
7. $\frac{5}{10} \cdot \frac{10}{3}$
8. $4.3(-2.9)$

What is each difference?

9. $-1.8 - 3.9$
10. $\frac{9}{4} - \frac{1}{7}$

What is each sum?

11. $\frac{7}{3} + \left(-\frac{3}{8}\right)$
12. $-6.1 + 1.7$
13. $-6 + (-3)$

What is the simplified form of each expression?

14. $\sqrt{169}$

15. $13 \left[6^2 \div (5^2 - 4^2) + 9 \right]$

16. $4(20 + 12) \div (4 - 3)$

17. $5(14 - 2)^2 \div 2$

18. $4^8 \cdot 4^3$

19. $\frac{a^{-10}}{a^5}$

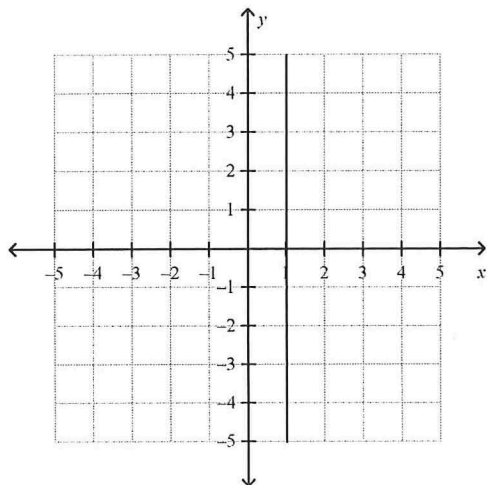
20. $(m^7)^2$

21. $-(10)^{-1}$

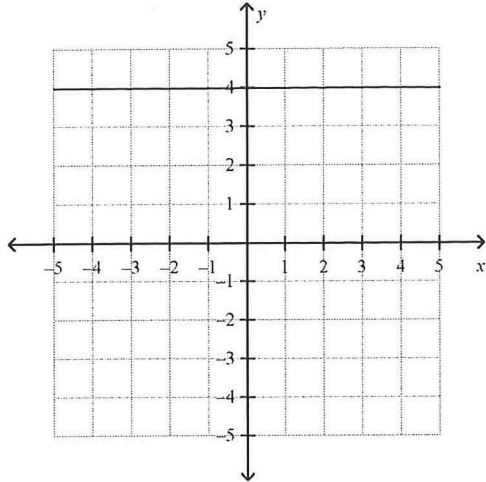
22. $(-5.1)^0$

What is the slope of the line?

23.

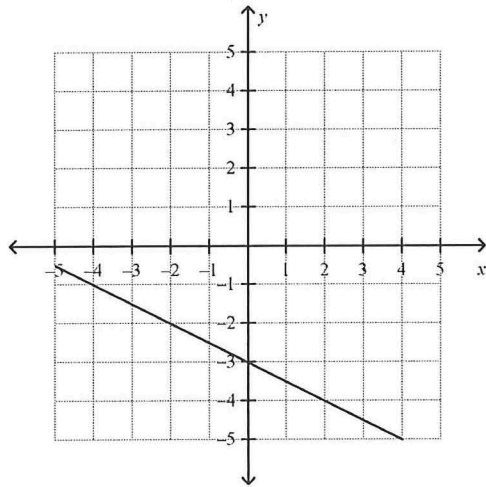


24.

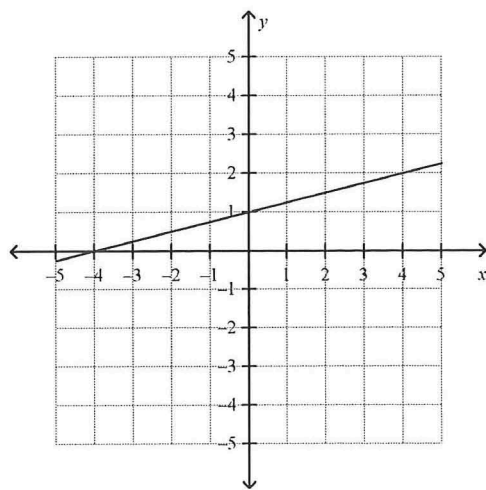


Find the slope of the line.

25.



26.



What is the slope of the line that passes through the pair of points?

27. $(1, 7), (10, 1)$

28. $(-\frac{5}{3}, -1), (-2, \frac{9}{2})$

What are the solutions of the inequality? Graph and check the solutions.

29. $-\frac{x}{4} \leq 2$

30. $d < 2$

31. $x \geq -3$

32. $x - 3 \leq -12$

33. $x + 7 \leq -8$

What is the solution of the equation?

34. $-6p + 7 = 3(2p - 3) - 4(-10 + 4p)$

35. $3p - 1 = 5(p - 1) - 2(7 - 2p)$

What is the solution of the equation?

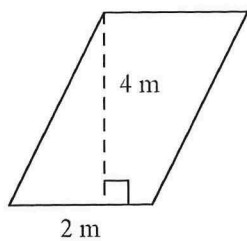
36. $\frac{6}{7}x - 8 = 7$

37. $16 = -d + 6$

38. Steven wants to buy a \$565 bicycle. Steven has no money saved, but will be able to deposit \$30 into a savings account when he receives his paycheck each Friday. However, before Steven can buy the bike, he must give his sister \$65 that he owes her. For how many weeks will Steven need to deposit money into his savings account before he can pay back his sister and buy the bike?
39. Angela and Neil are going to the movies. They each bought a medium popcorn, and Neil got a small soft drink. Angela had a \$5 gift certificate to put toward the cost, and Neil paid the rest, which came to \$27.90. A movie ticket costs \$10.00 and a medium popcorn costs \$5.50. How much does a small soft drink cost at the theater?
40. Display the set of data in a line plot.
58, 55, 54, 61, 56, 54, 61, 55, 53, 54

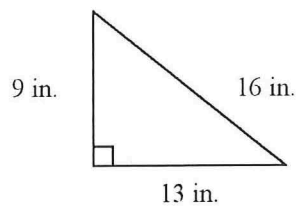
Find the area of the figure.

41.



Drawing not to scale

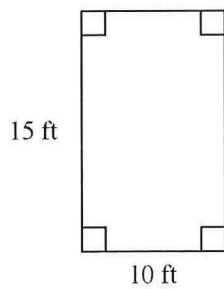
42.



Drawing not to scale

Find the perimeter of the figure.

43.

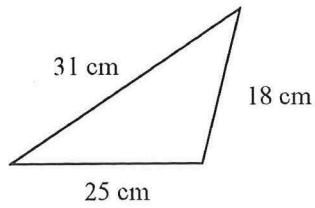


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44.



Drawing not to scale

45. Write $9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9 \cdot 9$ using an exponent.

Multiply or divide. Write your answer in simplest form.

46. $\frac{5}{12} \div \frac{2}{8}$

47. $\frac{3}{6} \times \frac{7}{10}$

Add or subtract. Write each answer in simplest form.

48. $\frac{6}{12} - \frac{3}{12}$

49. $\frac{3}{4} + \frac{5}{10}$

50. $\frac{6}{10} - \frac{1}{3}$