

Name _____

Algebra II CP Summer Assignment

Show all work. All answers should be written in fraction form, if necessary, unless indicated otherwise.

Solve each equation.

1. $-8x + 8(1-7x)=392$

2. $-2n-8(-4-4n)=-178$

3. Solve $z = -b + \frac{m}{a}$ for a

1. _____

2. _____

3. _____

Solve.

4. $2(6x+7)+6=104$

Solve.

5. $-298=7-5(-3-8a)$

6. Solve $cx = dr$ for x

4. _____

5. _____

6. _____

Solve by factoring.

7. $a^2 = 2a$

Solve by factoring.

8. $4x^2 - 6x - 18 = 0$

7. _____

8. _____

Solve using the quadratic formula.

9. $10x^2 + 9x = 16$

9. _____

Simplify.

11. $(5+6)((-1)-(-5))$

11. _____

Solve the system by graphing.

14. $y = -3x + 4$

$y = -\frac{1}{2}x - 1$

Factor completely.

10. $35x^4 - 21x^3 + 14x$

10. _____

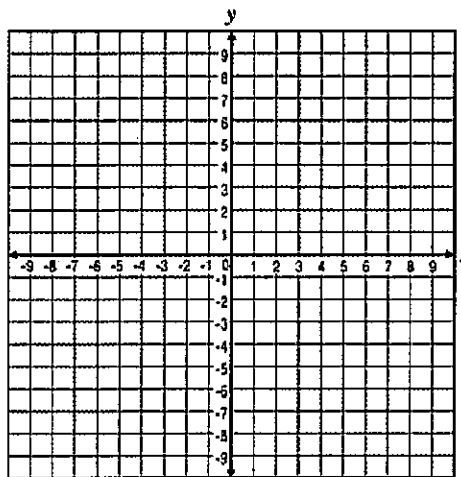
12. $\frac{-5+10-2}{3}$

12. _____

13. $-\frac{4}{-8-(4-10)}$

13. _____

14. Solution: _____



15. Solve the system using substitution.

$$\begin{aligned} 6x - 4y &= 12 \\ -x + y &= -4 \end{aligned}$$

16. Solve the system using elimination.

$$\begin{aligned} -5x + 6y &= -8 \\ -6x + 12y &= -24 \end{aligned}$$

15. _____

16. _____

Solve (any method).

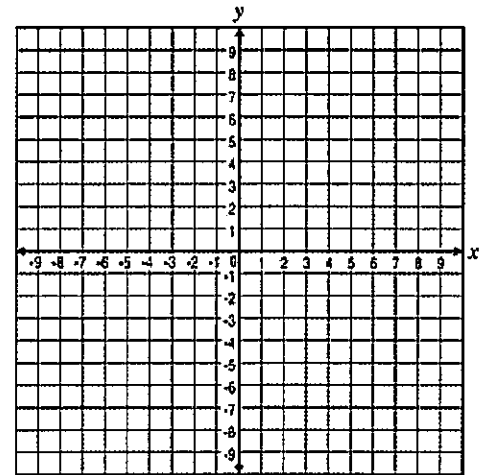
Sketch the solution to the system of inequalities.

$$\begin{aligned} 17. \quad 2x - y &= 10 \\ 4x - 2y &= 24 \end{aligned}$$

$$\begin{aligned} 18. \quad y &\geq 4x + 1 \\ y &> x - 2 \end{aligned}$$

17. _____

18.



Simplify.

19. $(4x-6)(4x+8)$

20. $(5x-1)^2$

21. $(2x-1)-3(x+5)$

19. _____

20. _____

21. _____

Find the slope of the line passing through the given points.

22. $(-10,-7)$ $(1,-2)$

23. $(8,-3)$ $(-3,-3)$

24. $(4,7)$ $(4,-2)$

22. _____

23. _____

24. _____

Write the equation of each line (in slope-intercept form) with the following information.

25. $(-5,3)$ and $(4,-5)$ are on the line.

26. The line is parallel to $2x - y = 10$ as passes through the point $(1,1)$

27. The line is perpendicular to $x + 3y = 12$ and passes through the point $(-2,6)$.

25. _____

26. _____

27. _____

Simplify.

28. $(2a^3b^4c)^2$

29. $(3a^2b^4c)(-4a^3bc^5)(2a^0bc)$

30. $2yx^4 \cdot xy$

28. _____

29. _____

30. _____

Factor completely.

31. $16x^2 - 1$

32. $25x^2 + 30x + 9$

33. $18x^3 + 33x^2 - 6x$

31. _____

32. _____

33. _____

34. $x^2 - 16x + 64$

35. $9m^2 - 24m + 16$

36. $9n^2 - 4$

34. _____

35. _____

36. _____

Simplify. Write your answer in radical form.

37. $\sqrt{48}$

38. $\sqrt{6} \cdot \sqrt{12}$

39. $\sqrt{80}$

40. $\sqrt{320}$

37. _____

38. _____

39. _____

40. _____