

What's on the Algebra I spring final?

Name _____

Solving Equations (one-step, two step, clean up)

1. $a + 4 = 7$

2. $5y = 12$

3. $X - 7 = 24$

4. $2x + 4 = 8$

5. $2b + 3 = 9$

6. $6b - 2 = 10$

7. $-7(4x - 2) = 14$

8. $4(-10 - 6x) = -136$

9. $-3(4 - 7x) = -243$

10. $3x - 4 + 8 = 30$

11. $2x - 8 + 3x = 52$

12. $17x + 1 - 3x + 1 = 54$

13. $3x - 12 = -5x + 7$

14. $13x + 4 = 3x + 84$

15. $7(5x + 4) = 2(3x - 6)$

Ratio and Proportion

16. $\frac{2}{7} = \frac{x}{-42}$

17. $\frac{k}{8} = \frac{-2}{5}$

18. $\frac{r}{7} = \frac{5}{-7}$

19. $\frac{z-1}{7} = \frac{8}{3}$

20. $\frac{7}{5} = \frac{-1}{x+1}$

21. $\frac{10}{-5} = \frac{n-3}{-1}$

22. What is 25% of 80? 23. 1% of what number is 7? 24. 5 is what % of 10?

25. 225% of what number is 60? 26. 5 is what percent of 10?

27. What is 55% of 600?

28. A shirt cost 56.78. What would it cost if it was 45% off?

29. If 95% off of a pair of pants is \$114. What was the original price?

30. A dress is marked 20% off. It was originally \$59.98. How much will you pay?

Find the percent of change:

31. Original price: \$152

Sale price: \$58

32. Original price \$549

sale price : \$324

33. Original price: \$59

new price \$100

Complete the chart:

Fraction	Decimal	percent
1/2		
	.4	
		60%
	.875	
		150%
9/10		

34.

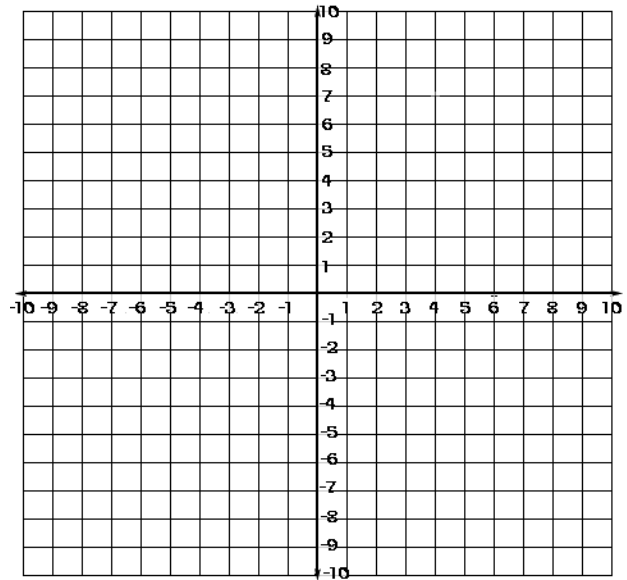
35.

- 36.
- 37.
- 38.
- 39.

Coordinate points

40. Plot the following points:

- A.(8,0) B.(6,2)
- C.(-8,-5) D.(-4,0)
- E.(-3, 6) F.(-3,-1)



functions

If $f(x) = -3x + 2$ and $g(x) = 4x - 3$, find

- 41. $f(5)$ 42. $f(-2)$ 43. $g(0)$ 44. $f(1)$ 45. $g(-2)$ 46. $f(-3)$

Make a t-table and solve (make sure you use 4 different numbers for the domain):

$$47. y = 2x - 5$$

$$48. y = -x + 5$$

$$49. x - y = 3$$

$$50. 3x + 4y = 24$$