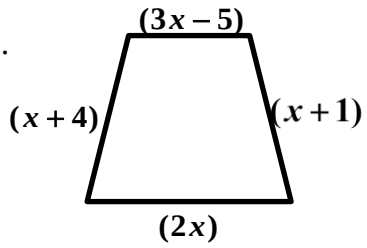
Name Period

Sec1H **Practice Test**
Solve Equations **Unit 1**

1. Write the formula for the following

- Area of Rectangle =
- Area of Triangle =
- Perimeter of any shape =

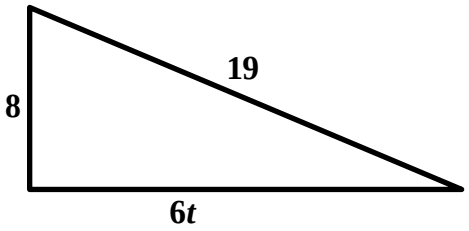
2.



Perimeter = 24 units

$x =$ _____

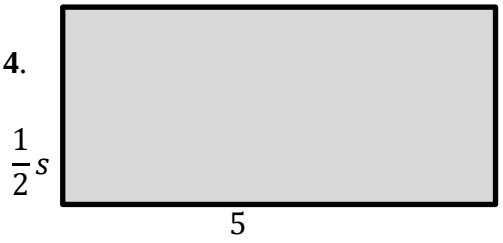
3.



Area = 72 units squared

$t =$ _____

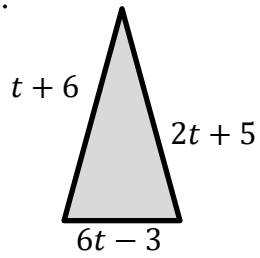
4.



Area = 60 square units

$s =$ _____

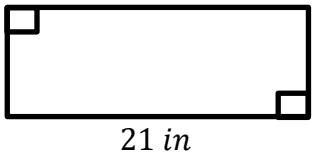
5.



Perimeter = 17 units

$t =$ _____

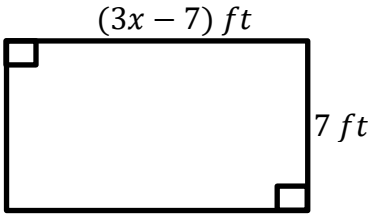
6.



Perimeter $= 56\ in$

$x =$ _____

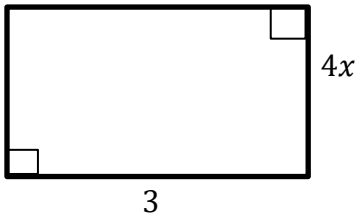
7.



Area $= 56\ ft^2$

$x =$ _____

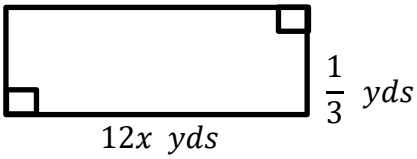
8.



Perimeter $= 20x\ units$

$x =$ _____

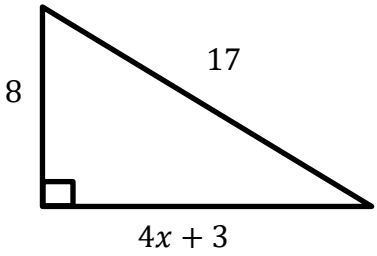
9.



Area $= 24\ yds^2$

$x =$ _____

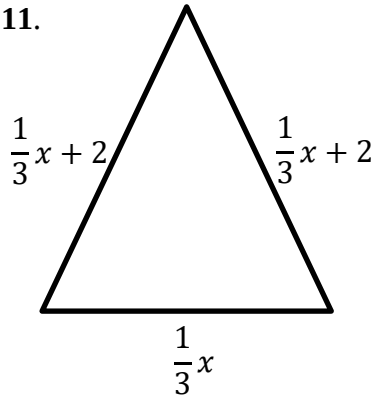
10.



Area $= 48\ units^2$

$x =$ _____

11.



Perimeter $= 7\ units$

$x =$ _____

In questions 12-19, solve for *x*.

12. $6x - 3(x - 2) = 2(x + 4) + 3x$

13. $\frac{3}{4}(12x + 8) + 3x = 66$

14. $7x - 4 - 2x + 17 = -3x + 11 + 2x$

15. $-\frac{x}{3} + 4 = -4$

16. $9x - (4x + 7) = 23$

17. $-\frac{x - 8}{7} = 21$

18. $2(3x - 1) = 6x - 2$

19. $\frac{1}{4}x = 16$

20. Put $-3x+4y=8$ in Slope-Intercept form.

21. Put $2x+\frac{1}{3}y=1$ in Slope-Intercept form.

22. Put $4x+y=7$ in Slope-Intercept form.

23. Put $y-8=\frac{3}{4}x$ in Slope-Intercept form.

24. $\boldsymbol{a=b+c}$, solve for c

25. $\boldsymbol{h=j+kl}$, solve for k

26. $\boldsymbol{h=j+kl}$, solve for j

27. $\boldsymbol{x=\frac{y}{z}}$, solve for z

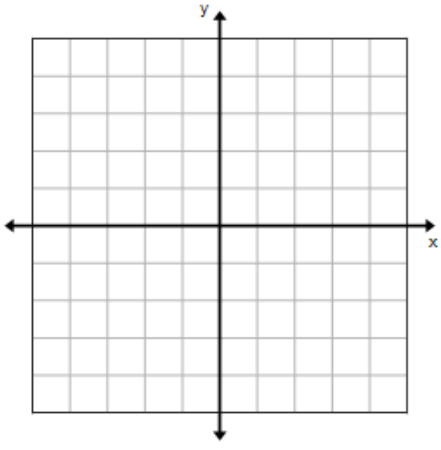
28. $\boldsymbol{x=\frac{y}{z}}$, solve for y

29. $\boldsymbol{x=y-z+w}$, solve for z

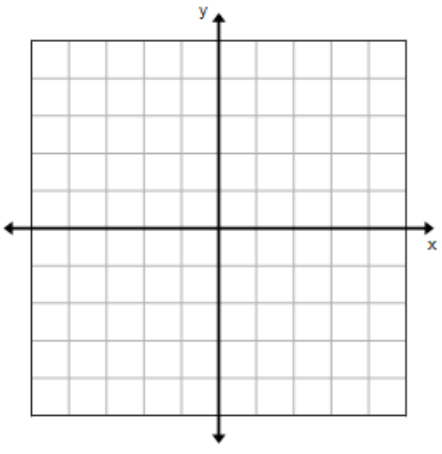
30. $\boldsymbol{x=y-z+w}$, solve for y

31. $\boldsymbol{r=st-uv}$, solve for u

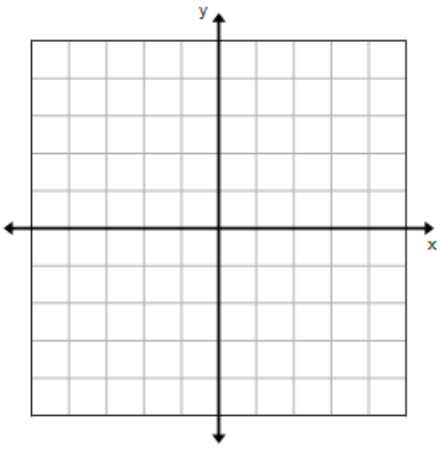
32. Graph $x=3$



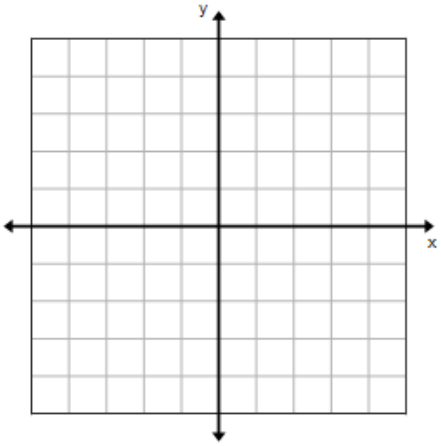
33. Graph $y=-2$



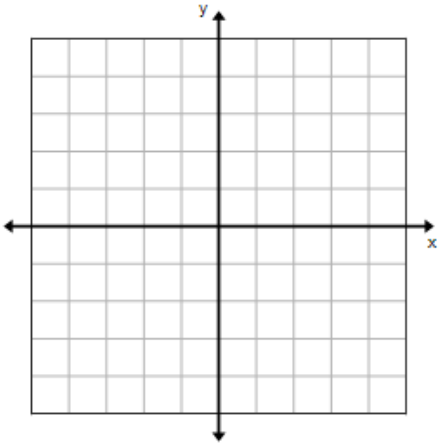
34. Graph $y = 3x$



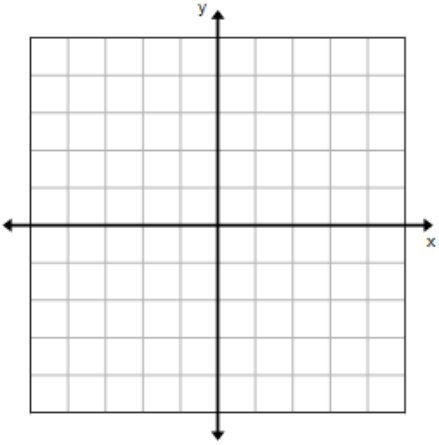
35. Graph $y = -x$



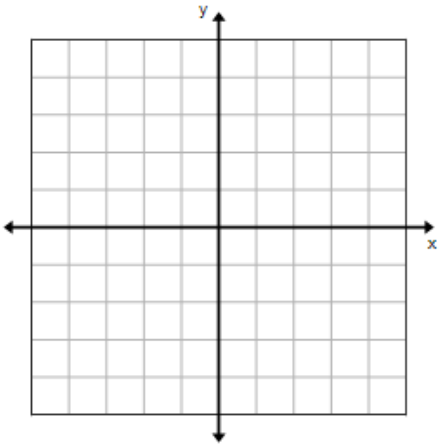
36. Graph $x + y = 3$



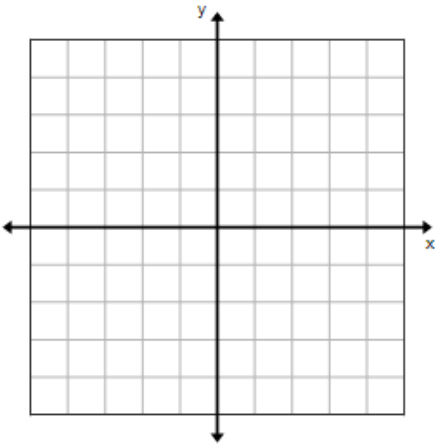
37. Graph $y = -2x + 5$



38. Graph $-\frac{1}{4}x + y = 2$

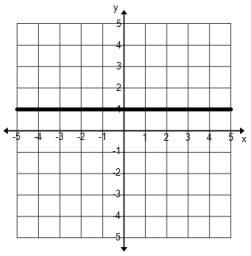


39. Graph $6x + 2y = 4$

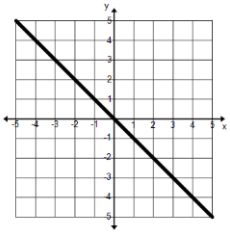


40. Which of the following is the correct graph of $y = x$?

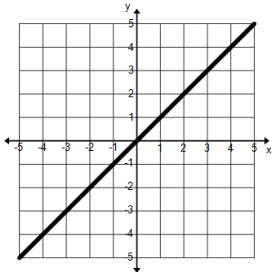
A



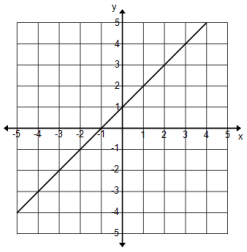
B



C

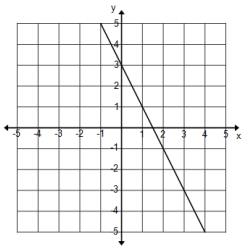


D

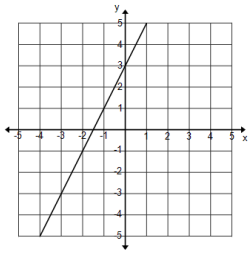


41. Which of the following is the correct graph of $y = -2x + 3$?

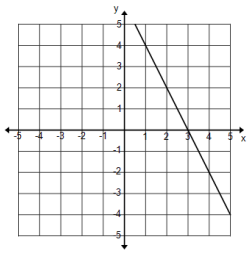
A



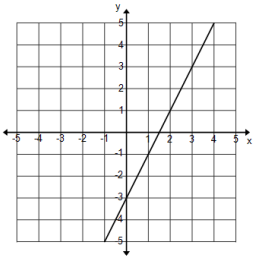
B



C

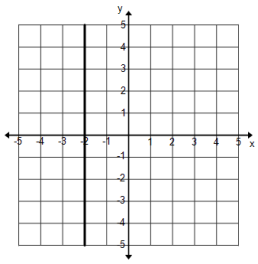


D

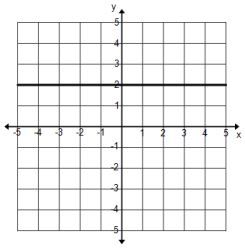


42. Which of the following is the correct graph of $y = -2$?

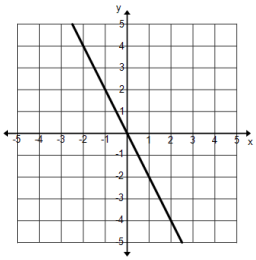
A



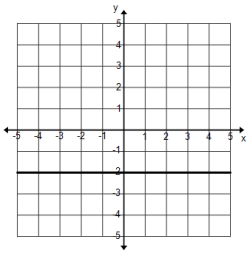
B



C

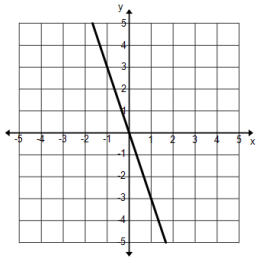


D

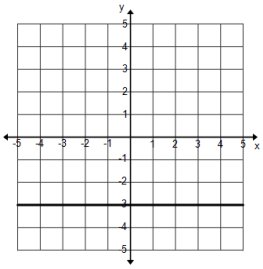


43. Which of the following is the correct graph of $y = -3x$?

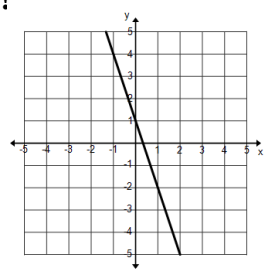
A



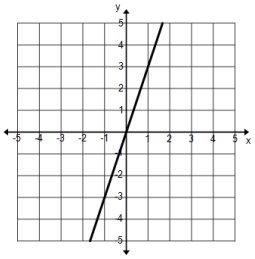
B



C

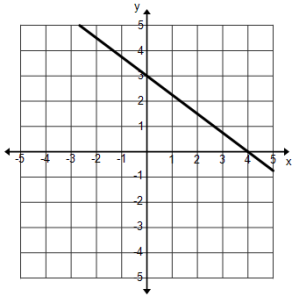


D

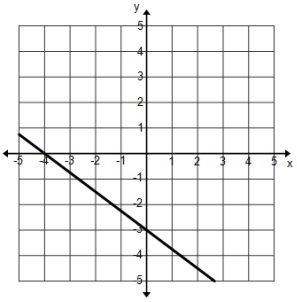


44. Which of the following is the correct graph of $3x - 4y = 12$?

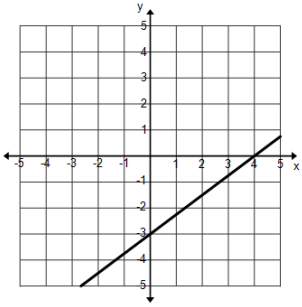
A



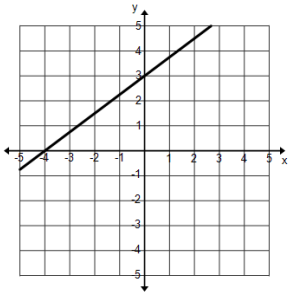
B



C



D



Match the equations #31-33 with the equivalent equations in A-D.

45. $-8x + 2y = -4$

46. $y = 4 - 2x$

47. $y = 2x - 4$

A. $y = 2 - 4x$

B. $y = -2x + 4$

C. $y = -2 + 4x$

D. $y = -4 + 2x$

48. Joshua is trying to save up money and is going to start working with his dad. He is going to pay him $7 per hour. He already has $85 saved before he starts working. Write an equation to represent how much money (y) Joshua has given x hours of working.

49. Joshua realized that his mom would actually pay him more to do extra chores around the house. When he started working he had saved up $120. After working for 5 hours he had $165. Supposing that Joshua is going to be making money at a constant rate, write an equation to represent how much money (y) Joshua has given x hours of working.

50. When you take over driving on a road trip, you are already 50 miles from home. After 4 hours driving you are 370 miles from home. Write an equation that will calculate how far you are from home based on how long you have been driving.

51. Traci bought 4 movie tickets (x) and 3 large popcorns (y). Her total was $47. Write an equation representing the situation.

52. A bank account starts with $1500 and someone is going to withdraw (take out) $31.50 each week.

a. Write an equation representing the situation.

b. How long until the account will only have $51 in it?