In questions 1-11, solve for _x_.

1. $4(x+2)=36$

2. $\dfrac{3}{4}(12x+8)+3x=66$

3. $4x-4-2x+17=-3x+19+2x$

4. $-\dfrac{1}{3}x+4=-4$

5. $9x-(4x+7)=23$

6. $6x-3(x-2)=2(x+4)+3x$
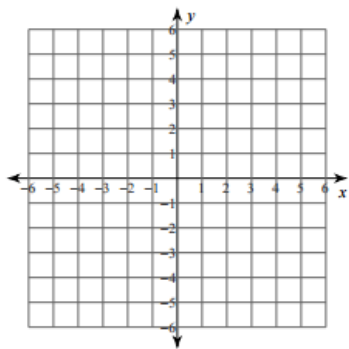
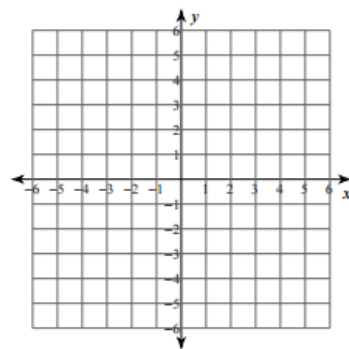7. $-\dfrac{x}{5}+10=30$

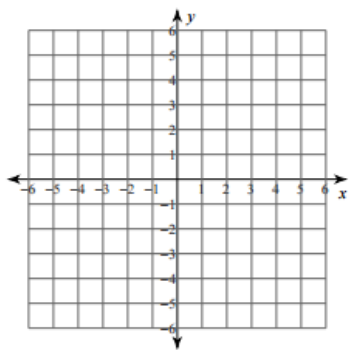8. $6x-2x+x-5=5x+5$

9. $2(3x-1)=6x-2$

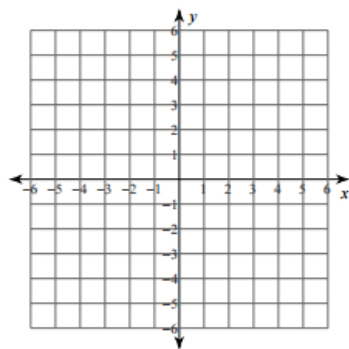10. $\dfrac{1}{4}x=16$

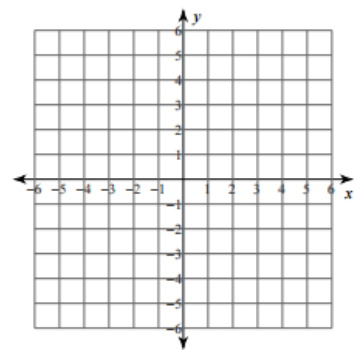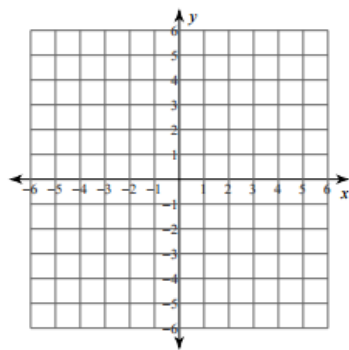**11.** Graph $x = 3$

12. Graph $y = -2$

13. Graph $y = 3x$
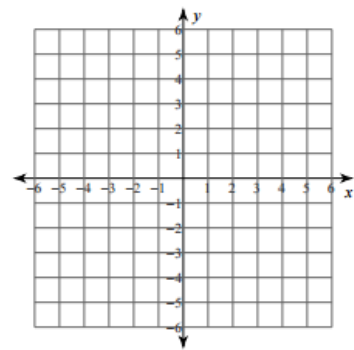

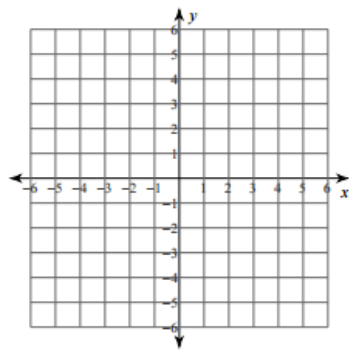**14.** Graph $y = -x$

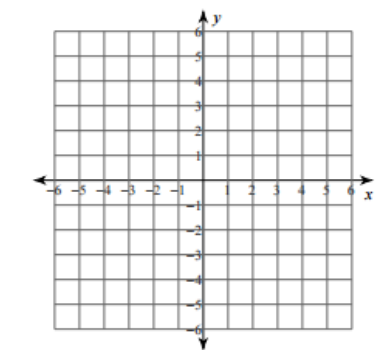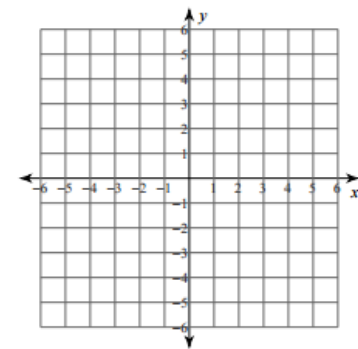**15.** Graph $x + y = 3$

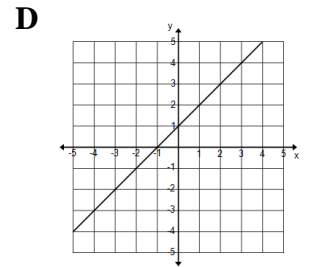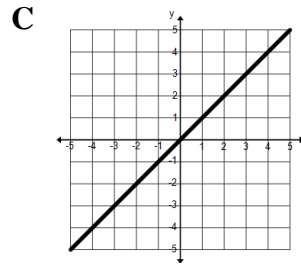**16.** Graph $y = -2x + 5$

17. Graph $y = \frac{2}{3}x - 5$
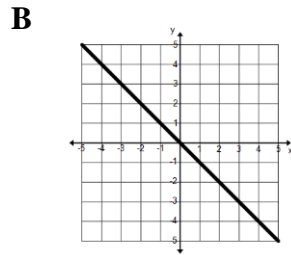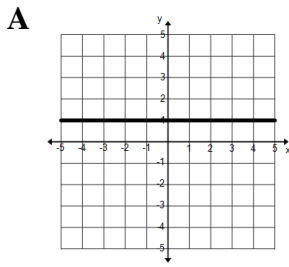

18. Graph $y = -\frac{3}{2}x + 4$

19. Graph $-2x + 4y = -8$

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

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

A   B   C   D

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

A   B   C   D
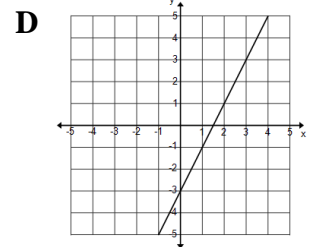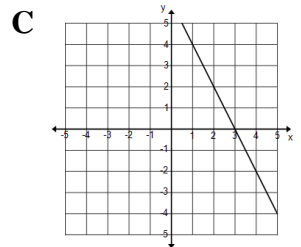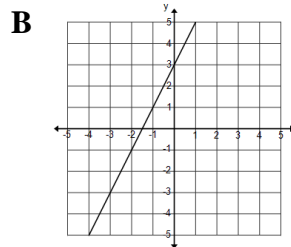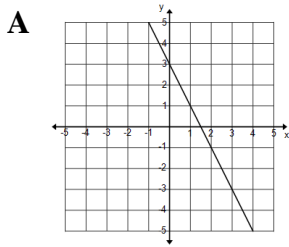
23. Which of the following is the correct graph of $y = -2$?

A   B   C   D

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

A   B   C   D

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

A   B   C   D

Match the equations #26-28 with the equivalent equations in A-D.

26. $y = 4x - 2$

27. $y = -2x + 4$

28. $y = 2x - 4$

A. $y = 2 - 4x$

B. $y = 4 - 2x$

C. $y = -2 + 4x$

D. $y = -4 + 2x$

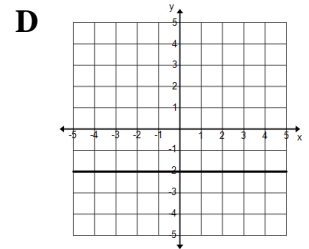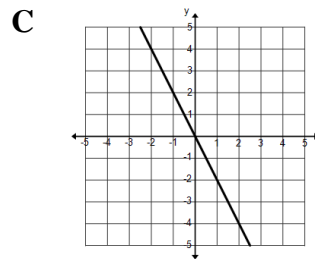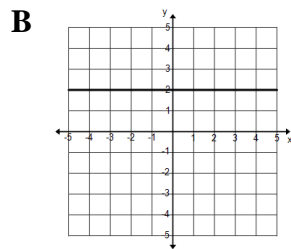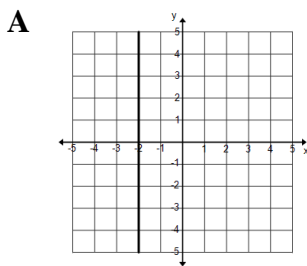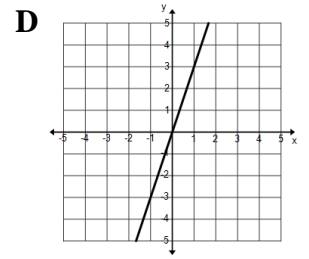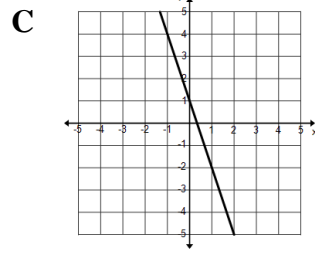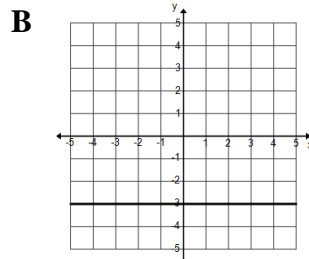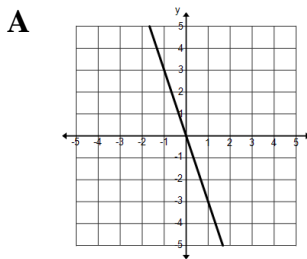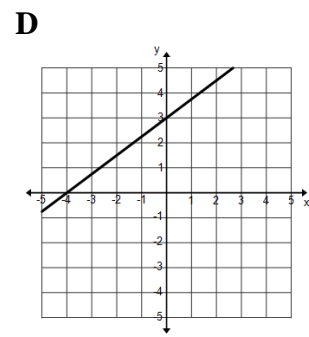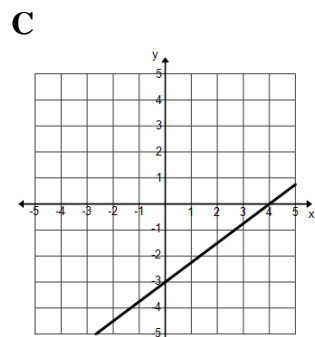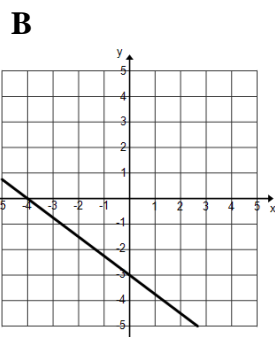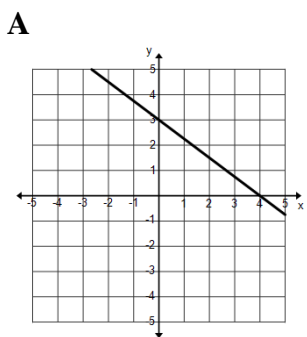29. Joshua is trying to save up money and is going to start working with his dad. He is going to pay him $7 per hour. He already has $85 saved before he starts working. Write an equation to represent how much money (y) Joshua has, given x hours of working.

30. Joshua decides to do chores for his mom instead. When he started working he had saved up $120. After working for 2 hours he had $138. 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.

31. Samuel bought x child tickets that cost $4 each and y adult tickets that cost $7 each. His total was $34. Write an equation representing the different combinations of child and adult tickets he could have bought.

32. Elizabeth needs cookies for a bake sale. Her mom makes some for her to use. Elizabeth is able to make 36 cookies per hour. After baking for 3 hours, she has a total of 132 cookies for the bake sale. Write an equation that represents how many cookies she has (y) based on how many hours (x) she's been baking.

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.

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

34. A bank account starts with $1500 and someone is going to withdraw (take out) $20 per week. Write an equation representing how much money is in the account (y) after x weeks.

35. Juan got a bunch of money for his birthday and decides to spend $35 each month. After 3 months he has $295 left. Write an equation for how much money (y) Juan has given how many months have passed (x).