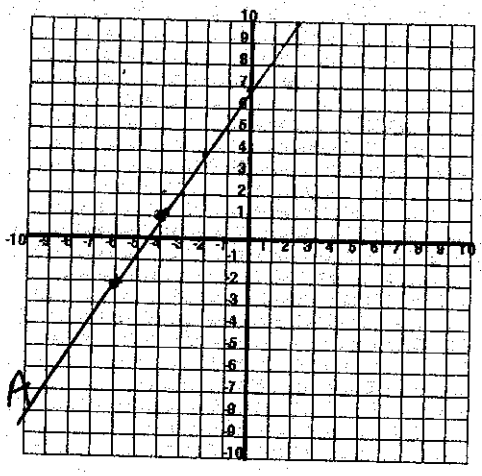
1. The formula $e = mc^2$ tells us that energy equals mass times the speed of light squared. Rewrite the formula solved for m.

2. What is the value of x in the equation:
(x-6)-(3x+2)=4(2x+2)

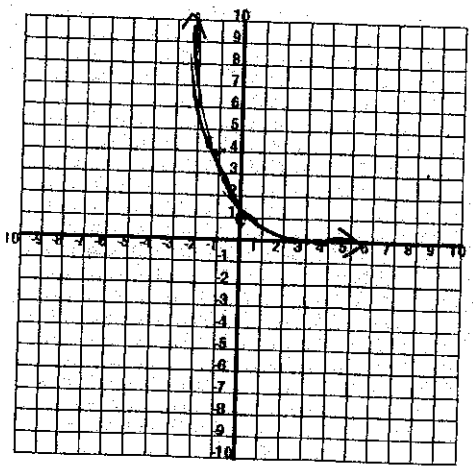
3. What is the slope of a perpendicular line to line A?



4. What is the range of the function y=(3x-3) for the domain $5 \leq x \leq 10$

5. The function f(x)=17,000$(0.88)^x$ is used to predict the value of a car x years from now. Predict the value of a car 15 months from now.

6. The number of people leaving a certain city is decreasing by 5% each year as described by the function below.
f(1)=175,000
f(n+1)=0.4f(n)
What is the value of f(6)?

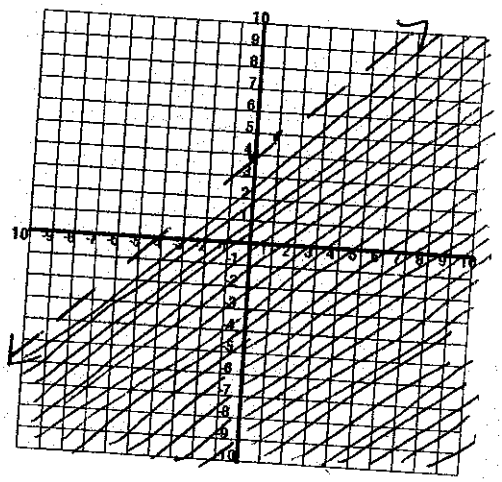


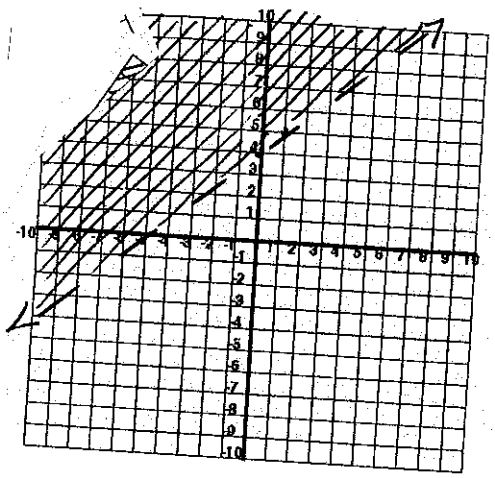
7. Which function is graphed

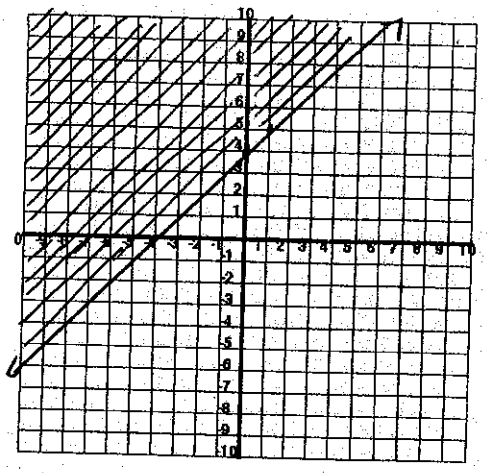
Choices on next page.

a) y=4x
b) y=$(-1/4)^x$
c) y=-4^{-x}
d) y=$(1/4)^x$

8. Which is the graph of the solutions of y>x+4







9. Write an arithmetic sequence for the following sequence of numbers
2,-1,-4,-6

10. A camping facility uses the function f(x)=25x+15 to calculate the cost to camp for (x) number of days. The maximum number of days a campsite can be rented is 14 days. What is the domain of the function?

a) $0 \leq x \leq 365$
b) $0 < x < 365$
c) $0 \leq x \leq 14$
d) $0 < x < 14$