

#1-3, Translate each into a math equation or expression.

1. The product of 5 and a number is 13.
2. Fourteen less than half a number is the same as the sum of eight and the number.
3. Five more than the quotient of eleven and a number

#4-5, Write an equation which represents each situation.

4. a. Mrs. January bought a Dr. Pepper for \$1.59 and paid \$3.05 for each gallon of gas she pumped. The total she owed was \$45.19. Let g represent the gallons of gas.

b. Solve your equation
5. a. Sending a package through the US mail cost \$3.50 plus \$0.25 per ounce. Sending a package through FedEx costs \$4.75 plus \$0.10 per ounce. At what weight will the two companies charge the same?

b. Use your equation for #5 to decide which business you should use to send a package weighing 8.5 oz.

7. **Convert:** 88 cm = _____yards? (2.54 cm = 1 inch)

8. **Convert:** 35 feet per second = _____miles per hour? (1 mile = 5280 ft)

9. 35 is 42% of what number?

10. What percent of 250 is 18?

11. A salesman earns a base salary of \$36,000 plus 2% commission on sales. His total earnings in one year was \$45,500, how much did he sell?

12. The Amazon rain forest usually gets 225 days of rain per year. Last year this decreased by 15%. How many rainy days last year?

13 The population of marmots in one district of the forest 2013 is approx. 125% of what it was in 2012. If there were 42 in 2012, how many now?

14. A dinner costs \$56 plus tax. If the tax rate is 5%, what is the total bill for the dinner?

15. A Kelty jacket costs \$89.00 before tax and \$94.79 after the sales tax is included. What is the tax rate?

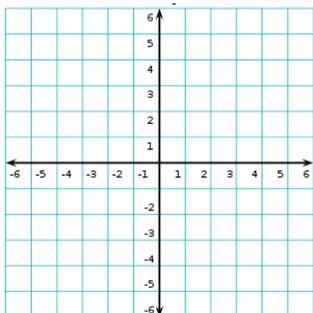
16. On a scale map of New York city 3 inches represents 20 actual miles. Therefore, 6.4 inches would represent how many miles?

17. Jupiter is so large, its gravity is tremendous. For example, a 110 pound high school girl would weigh 260 pounds on Jupiter. How much would a 152 pound high school boy weigh?

#18-19, Graph each using a table of values. Please plot 5 points.

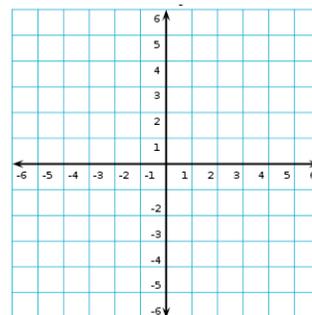
18. $y = |x - 1| + 2$

x	y
-2	
-1	
0	
1	
2	



19. $y = 2x^2 + 3$

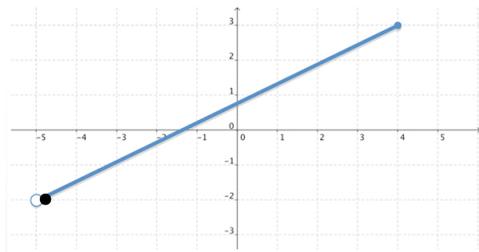
x	y
-2	
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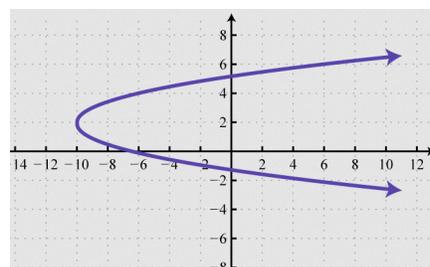
20. If $f(x) = -3x + 20$ and $g(x) = x - 10$ then find $f(-2)$ and $g(5)$

#21-22, Find the domain and range of each graph.

22.

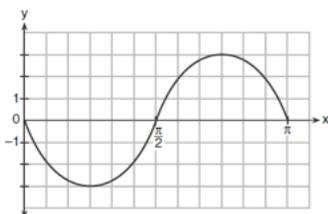


23.

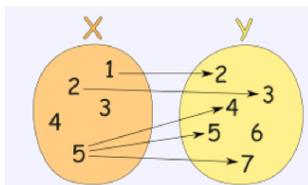


#24-26, Is the relationship a function?

24.



25.



26.

