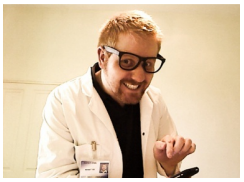

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Ready, Set, Go!

Ready

Topic: Simple interest

*When a person borrows money, the lender usually charges "rent" on the money. This "rent" is called interest. Simple interest is a percent "***r***" of the original amount borrowed "***p***" multiplied by the time "***t***", usually in years. The formula for calculating the interest is* **i = prt.**

Calculate the simple interest owed on the following loans using the simple interest formula above.

1.	*p = $1000*	*r = 11%*	*t = 2 years*	*i =* _____
2.	*p = $6500*	*r = 12.5%*	*t = 5 years*	*i =* _____
3.	*p = $20,000*	*r = 8.5%*	*t = 6 years*	*i =* _____
4.	*p = $700*	*r = 20%*	*t = 6 months*	*i =* _____

Juanita borrowed $1,000 and agreed to pay 15% interest on the initial amount for 5 years. Below is a table that shows how much money Juanita owed the lender at the end of each year of the loan.

End of year	Amount owed to Lender
1	$1150
2	$1300
3	$1450
4	$1600
5	$1750

5. Look for the pattern you see in the table above for the amount (A) owed to the lender. Write a function that best describes A with respect to time (in years).

6. The lender has changed their policy. Now the lender will charge 15% of the amount owed the previous year instead of 15% of the amount of the original loan. Make a new table and find a new function to show the amount owed each year.

End of year	Amount owed to Lender
1	$1150
2	$1322.50
3	
4	

Set

Topic: The 4 forms of a linear equation

8. Below are the 4 forms of the same linear equation. For each equation, do the following
   (a) Circle the rate of change
   (b) Name the point that describes the y-intercept
   (c) Name the point that describes the x-intercept

Slope-intercept	Point-slope	Standard	Recursive formula	(b)	(c)
8. y = 3x – 2	y – 13 = 3(x – 5)	3x – y = 2	$f(0) = -2$ $f(n) = f(n-1) + 3$		
9. y = ¼ x +7	y – 5 = ¼ (x + 8)	x – 4y = -28	$f(0) = 7$ $f(n) = f(n-1) + ¼$		
10. y = -⅔x + 3	y + 1 = -⅔(x – 6)	2x + 3y = 9	$f(0) = 3$ $f(n) = f(n-1) - ⅔$		

Go

Topic: Solving multi-step equations

Solve the following equations

11. $12 + 6x - 4 = 5 + 2(3x - 1)$

12. $5(2x + 4) = 3(x + 5) - 19$

13. $7 - 3(4x + 2) = 6(2x + 3) - 17$

14. $2(x + 1) = 6(x - 3)$

15. What does it mean when you have solved an equation?

16. Explain how a linear equation can have more than one solution.

Need Help? Check out these related videos:

Solving equations: http://www.purplemath.com/modules/solvelin4.htm

Interest: http://www.khanacademy.org/finance-economics/core-finance/v/introduction-to-interest