

# Happy Tuesday, November 1

Do Now:

Solve for the price of the car!  $\$8924$

I paid a \$1609 down payment on this car and I have to pay \$209 for 35 more months, how much money will be invested in this car by the time the 35 months are up?



Nov 1-7:18 AM

## Haunted Level Review

Keep everything in your calculator until the end

$$2\ln x + \ln x^2 = 3$$

$$\ln x^2 + \ln x^2 = 3$$

$$\ln x^4 = 3$$

$$x^4 = e^3$$

$$x = 2.17$$

$$2\ln(2x-3) = 8$$

$$\ln(2x-3) = 4$$

$$e^4 = 2x-3$$

$$\frac{e^4 + 3}{2} = x$$

$$\log_2(x+3) + \log_2(x-3) = 4$$

$$\log_2(x+3)(x-3) = 4$$

$$2^4 = x^2 - 9$$

$$16 = x^2 - 9 \quad \sqrt{25} = \sqrt{x^2}$$

$$3\log_4 x - \log_4 2 = 5$$

$$\log_4 x^3 - .5 = 5$$

$$\log_4 x^3 = 5.5$$

$$4^{5.5} = x^3$$

$$\sqrt[3]{2048} = x$$

$$12.69920$$

Nov 1-7:32 AM

## Quiz Correction Review and Questions

Nov 1-8:15 AM

Change your words, change your mindset

Video Clip - sit back and relax

Nov 1-7:36 AM

## What Kind of Mindset Do You Have?



I can learn anything I want to.  
When I'm frustrated, I persevere.  
I want to challenge myself.  
When I fail, I learn.  
Tell me I try hard.  
If you succeed, I'm inspired.  
My effort and attitude determine everything.



I'm either good at it, or I'm not.  
When I'm frustrated, I give up.  
I don't like to be challenged.  
When I fail, I'm no good.  
Tell me I'm smart.  
If you succeed, I feel threatened.  
My abilities determine everything.

Nov 1-8:20 AM

~~I'm not good at this~~

What am I missing?

Nov 1-7:53 AM

~~This is too hard~~

This may take some  
time and effort.

Nov 1-7:53 AM

~~I can't do math.~~

I'll ask questions to  
help me understand!

Nov 1-7:53 AM

~~It's good enough~~

Is this really my best  
work?

Nov 1-7:53 AM

~~I give up.~~

I can always improve;  
I'll keep trying!

Nov 1-7:53 AM

~~I made a mistake.~~

Mistakes help me  
improve.

Nov 1-7:53 AM

~~I don't get this at all.~~

I'll use some of the  
strategies I've learned.

Nov 1-7:53 AM

~~I'll never be as smart as them.~~

I'm going to figure out what they do and try it.

Nov 1-7:53 AM

U3LT5 I can use my knowledge of logs and exponentials to investigate real world situations.

Compound interest is interest earned or paid on both the principal and previously earned interest.

Its function has the form  $A = P\left(1 + \frac{r}{n}\right)^{nt}$

- A* represents the balance after *t* years
- P* represents the principal, or original amount
- r* represents the annual rate of interest expressed as a decimal
- n* represents the number of times interest is compounded per year
- t* represents time in years

The half-life of a substance is the time it takes for one-half of the substance to decay into another substance.

Its function has the form  $A = P(0.5)^t$

- A* represents the final amount
- P* represents the original amount
- t* represents the number of half-lives in a given time period



Nov 1-8:04 AM

Exit Slip: What is the difference between growth and fixed mindset?

Homework: Half-life and Interest Worksheet

Nov 1-8:18 AM

Nov 1-8:00 AM