10.6 solving calc.notebook March 29, 2017

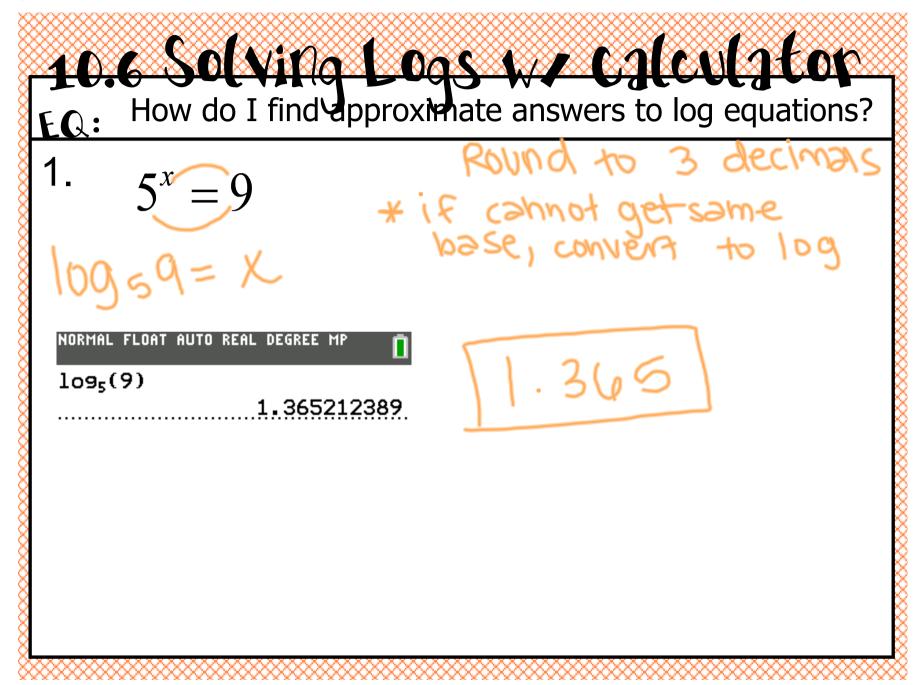
Warm-up Wednesday
Solve without a calculator (leave answers exact)

1.
$$4^x = 7$$

2.
$$\log x + \log(x - 9) = 1$$
 $\log_{10}(x(x - 9)) = 1$
 $\log_{10}(x(x - 9)) = 1$

About M

- 1. What famous person do you think you most look like?
- 2. Would you rather find the love of your life at 50, or someone decent at 25?





How do I find approximate answers to log equations?

2

$$\ln x = -\frac{1}{2}$$





NORMAL	FLOAT	AUTO	REAL	DEGREE	MP	

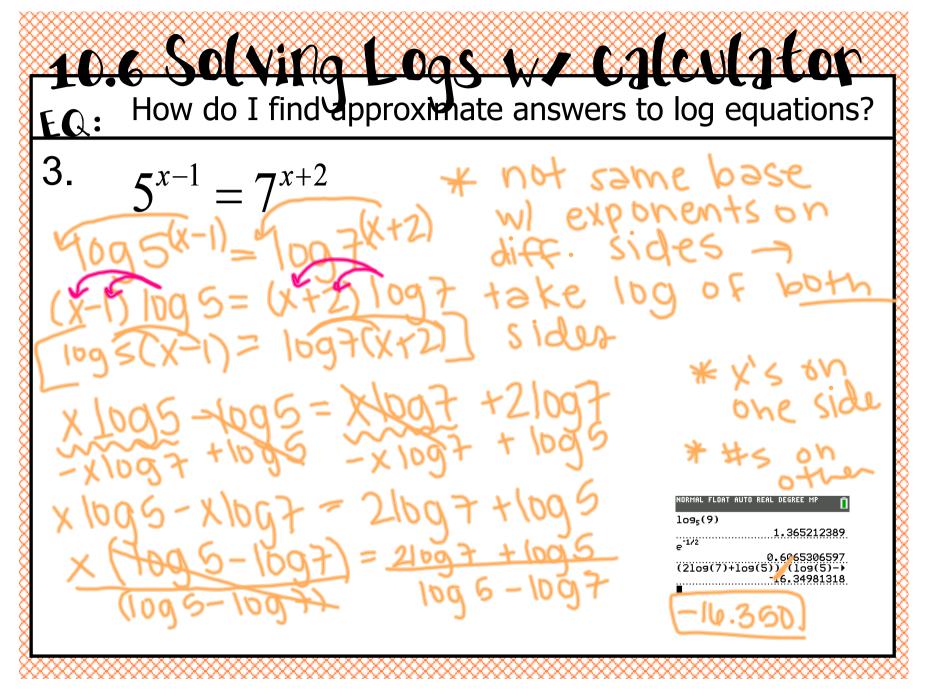
lo9₅(9)

1.365212389

e^{-1/2}

0.6065306597

X=.607





How do I find approximate answers to log equations?

4.

$$\ln x = \ln 4 + \ln 6$$
 $\ln x = \ln (4.6)$
 $1 \times 1 \times (4.6)$
 $1 \times 1 \times (4.6)$



Solve each equation for x. Round your answer to the nearest thousandth.

2. $4^x = 7$

- **4.** $e^{2x} = 4$ **5.** $e^{\frac{1}{2}x} = 6$

6. $e^x = 2$

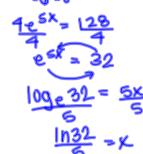
- 7. $\ln x = 1$
- 8. $\ln x = \sqrt{3}$

9. $\ln x = -5$

10.
$$\ln x = \ln 2 - \ln 5$$

11.
$$\ln x = \ln e^2 - 1$$

12.
$$4e^{5x} + 6 = 134$$



13.
$$\ln x = \ln 3 + \frac{1}{2}$$

$$2^x = 3^{x-1}$$

16.
$$3e^{5x} + 2 = 7$$

17.
$$6\ln(4x)-1=14$$

18.
$$3(6)^{3x-2} + 4 = 12$$

