**MATHXL assignment due 1/29/18

AA2 Warm Up Friday
wk 3 sem 2

Write in exponential/logarithmic form.

1. $\log_7 49 = 2$
2. $64^{\frac{2}{3}} = 16$
3. $\log_c w = y$
4. $d = w^2$

5. **Nineteen years ago, Mary Lou purchased a gold ring which has appreciated 8.32% each year. If she bought it for $2100, how much is it worth now?**

$$2100(1.0832)^{19}$$
$$= \$\,9587.02$$

6. **Eight years ago, Michael invested $7,000 in an account that paid 2.75% interest compounded weekly. Does he have enough money in this account to buy a car for $8750?**

$$A(8) = 7000\left(1+\frac{0.0275}{52}\right)^{52\cdot 8}$$
$$= 7000\left(1+\frac{0.0275}{52}\right)^{416}$$
$$= \$\,8722.03$$

No, Michael does not have enough money yet....how much longer will he have to wait?? Stay tuned...we'll be able to figure that out soon.

7. **Simplify. Write in a+bi form**

$$\frac{8}{3-4i}$$

$$\left(\frac{8}{3-4i}\right)\bullet\left(\frac{3+4i}{3+4i}\right)$$
$$\frac{24+32i}{9-16i^2} = \frac{24+32i}{25}$$
$$\frac{24}{25}+\frac{32}{25}i$$