Exponential Functions Review

MCR 3U

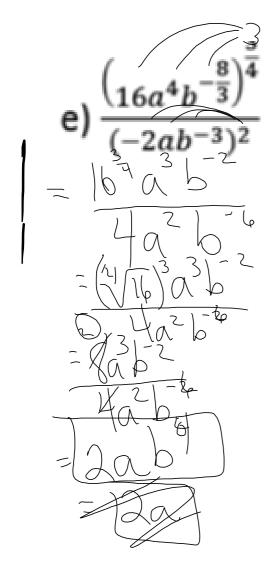
Example 1

Simplify:

a)
$$-9^{\frac{1}{2}}$$
b) $25^{\frac{3}{2}}$
c) $(64n^{\frac{3}{4}})^{\frac{1}{2}}$
d) $\frac{\sqrt[4]{81}}{81^{-\frac{1}{4}}}$
e) $\frac{(16a^{4}b^{-\frac{9}{3}})^{\frac{9}{4}}}{(-2ab^{-3})^{2}}$

$$\sqrt[4]{-9^{\frac{1}{2}}}$$

$$\sqrt[4]{-9^$$

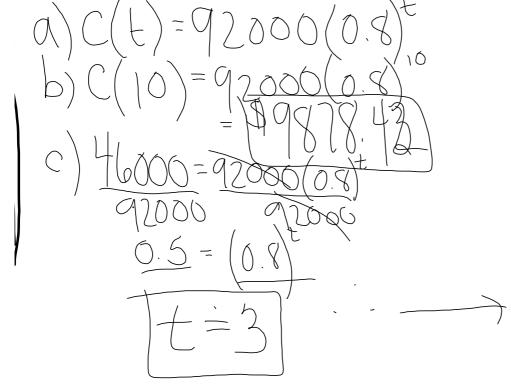


Example 2

Mr. Nantais buys a new Tesla worth \$92,000. The car depreciates 20% per year.

- a) Determine an equation that best models the scenario.
- b) What is the price of the Tesla after 10 years?

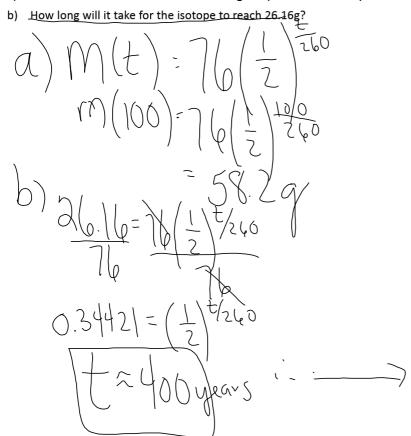
c) How long will it take for the price of the Tesla to be worth half of the original price?



Example 3

The half-life of uranium is 260 years.

a) Find how much uranium remains if a 76g sample is left for 100 years.



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Review Questions

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Page 210, #1,4,6-9
Page 212-21, #1,2,4-6,11ade,13
• Review "Exponential Functions Investigation" Worksheet
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- Review "Exponential Applications" Worksheet (Word Problems)