

A Worthless Pair of Wheels

Allison wants to sell her old bicycle, but she is not sure what price to ask. The bike cost \$200 when it was new. A friend told her that bicycles typically lose 50% of their value during the first year of ownership, 20% during the second year, and 10% for each year after that.

Allison has owned her bike for five years. On the basis of the information her friend has given her, she figures her bike has lost 100% of its value and is worth nothing.

$$50\% + 20\% + 10\% + 10\% + 10\% = 100\%$$

Allison's bike is worth something. Explain the error in her thinking and find the fair asking price for the bike based on the information given. Explain how you find that price.



Explain It!