

Word problems activity

1. Mydd L'Manager works at SCP Advertising, and she is looking at how her salary has changed over the last 2 years. Between 2012 and 2013, her annual salary increased by \$11,000, and between 2013 and 2014, her annual salary increased by 10%. If Mydd's annual salary in 2014 is \$102,300, what was her annual salary in 2012?

To start, do **NOT** try to solve the problem. Instead:

- Give variable names to all of the quantities in the problem.
- Figure out what the goal of the problem is. In other words, what are you solving for?
- Translate the key parts of the question, word by word, into mathematical statements and questions. In particular, write down an equation or equations relating the different quantities in the problem.

After you have done all of those steps, **THEN** solve the problem, and write down your final answer in the form of a complete sentence.

2. The movie studio Phony Pictures releases the film *The Mango Express* online. Viewers can purchase the movie for \$15 and rent the movie for \$6. The studio counts a total of 2 million (2,000,000) transactions (purchases plus rentals) over the first week of release, and collects a total of \$15 million (\$15,000,000) of revenue in that first week. How many rentals were there in the first week of release?

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3. In calendar year 2015, retired rock stars Kim and Francis together made a total of \$285,571.60. Also, Kim made 15% more than Francis did in 2015. How much money did Francis make in 2015?

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4. On opening weekend, the blockbuster hit movie *Rouge 1: A Makeup Wars Story* holds special 11:59pm showings for charity. At these midnight showings, the movie sells a total of 103,874 tickets, some of which are for 3-D showings and the rest of which are for regular 2-D showings. The movie makes a total of \$1,598,051 in revenue, with regular tickets costing \$14 and 3-D tickets costing \$19. How many people bought regular 2-D tickets, and how many people bought 3-D tickets?

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