1.3 Scott's Macho March *A Solidify Understanding Task*

After looking in the mirror and feeling flabby, Scott decided that he really needs to get in shape. He joined a gym and added push-ups to his daily exercise routine. He started keeping track of the number of push-ups he completed each day in the bar graph below, with day one

showing he completed three push-ups. After four days, Scott was certain he can continue this pattern of increasing the number of push-ups for at least a few months.



1. Model the number of push-ups Scott will complete on any given day. Include both explicit and recursive equations.

Scott's gym is sponsoring a "Macho March" promotion. The goal of "Macho March" is to raise money for charity by doing push-ups. Scott has decided to participate and has sponsors that will donate money to the charity if he can do a total of at least 500 push-ups, and they will donate an additional \$10 for every 100 push-ups he can do beyond that.

2. Estimate the total number of push-ups that Scott will do in a month if he continues to increase the number of push-ups he does each day in the pattern shown above.

© 2013 Mathematics Vision Project | MVP In partnership with the Utah State Office of Education Licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported license.



3. How many push-ups will Scott have done after a week?

4. Model the total number of push-ups that Scott has completed on any given day during "Macho March". Include both recursive and explicit equations.

5. Will Scott meet his goal and earn the donation for the charity? Will he get a bonus? If so, how much? Explain.



© 2013 Mathematics Vision Project | Mold VP

In partnership with the Utah State Office of Education Licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported license.