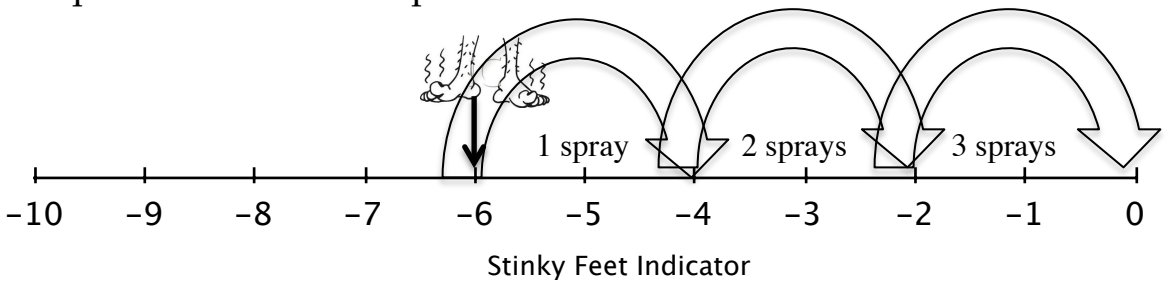
Stinky Feet II – New and Improved!

As Head Researcher at Dr. Smarts' company of odor eliminating products you have developed a "new and improved" ultra-strength formula for eliminating stink in shoes! The new formula requires fewer sprays to eliminate odor in shoes, but you need to confirm your hypothesis that **one spray** can now move the "Stinky Feet" indicator **two units** towards zero. For example, if the "Stinky Feet" indicator is at -10 and one spray is sprayed in to the shoe it will *eliminate* -2 odor, moving the "Stinky Feet" indicator to -8.

Stinky Feet Indicator 

Based upon the shoes below, how many sprays would you spray in each shoe? Draw arrows, showing the movement of each spray, and fill in a "math equation" below each problem.

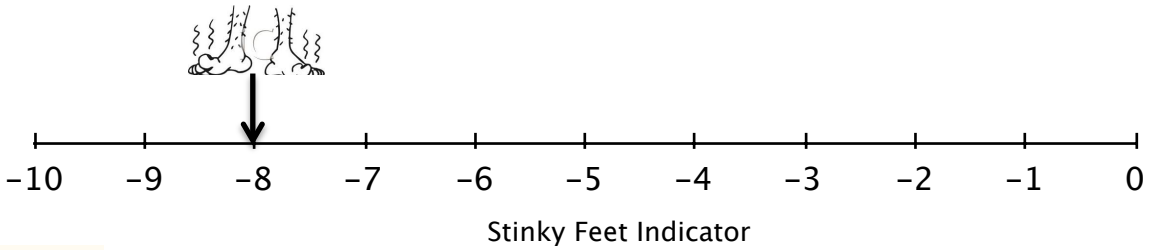
1)



If the Stinky Feet Indicator is at -6, how many sprays would be needed eliminate the odor and bring the "stink" to 0? _____ sprays

math equation: -6 + (3 sprays)(2 units) = 0
-6 + 6 = 0

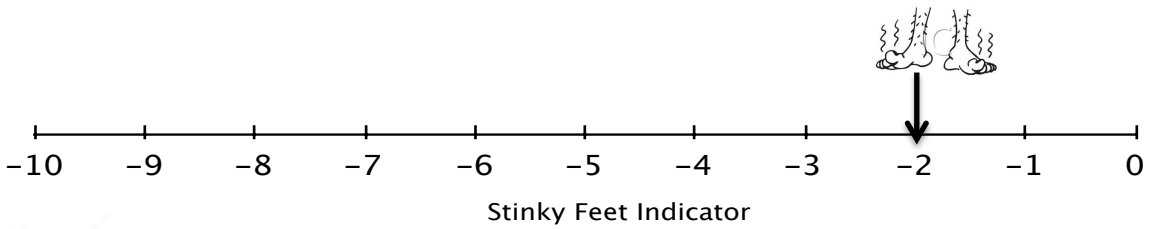
2)



If the Stinky Feet Indicator is at -8, how many sprays would be needed eliminate the odor and bring the "stink" to 0? _____ sprays

math equation: _____ + _(_____)(____) = 0
____ + _____ = 0

3)



If the Stinky Feet Indicator is at -2, how many sprays would be needed eliminate the odor and bring the "stink" to 0? _____ sprays

math equation: _____ + (_____)(____) = 0

____ + _____ = 0

4) Record your results from 1-3 in the table.

	Initial "Stinky Foot" Indicator	Number of sprays x two units per spray	Math equation:
#1	-6	3 sprays x 2 units = +6	-6 + 6 = 0
#2	-8		
#3	-2		

5) If the Stinky Feet Indicator indicated a foot smell of -4, how many sprays would be needed to eliminate the odor? To eliminate -4, _____ sprays would be needed because _____.

6) In a later test, another formula produced results that showed that for 1 spray the "stink" was reduced by 3 units, moving the Stinky Feet indicator 3 units towards 0.

a) If the Stinky Feet indicator was at -9, how many sprays would it take to eliminate the odor? math equation: _____ + (_____)(____) = 0

____ + _____ = 0

_____ sprays

b) If the Stinky Feet indicator was at -6, how many sprays would it take to eliminate the odor? math equation: _____ + (_____)(____) = 0

____ + _____ = 0

_____ sprays

Congratulations, your research project was a success! Your production of an improved Stinky Feet Odor Eliminator has earned a promotion to Vice President at Dr. Smarts' company!!