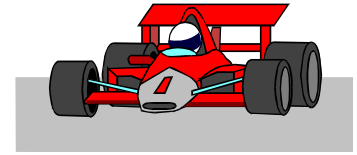




Problem of the Month

Movin 'n Groovin



Level A:

Maria and Tran each have a pet hamster. They have a maze for the hamsters to run through. Maria says she thinks her hamster can run through the maze faster than Tran's. They each time their hamster as it runs through the maze. It takes Maria's hamster 19 seconds to travel through the maze. It takes Tran's hamster 15 seconds.

Which hamster is faster? Explain how you know.

How much faster is the faster hamster compared to the slower hamster at running through the maze? Explain your answer.

Level B:

Lexie wanted to have a heel-toe race with her older brother, Josh, and her sister, Hannah. She said, "My feet are smaller, so I should only have to go a shorter distance than you two." Her sister said, "That makes sense - let's race our ages." They measured off 7 feet for Lexie's track, 16 feet for Josh's track and 10 feet for Hannah's track. "Now let's measure our shoes," said Josh. "My shoe is $\frac{1}{2}$ of a foot," said Lexie. "Three of my shoes add up to 2 feet," said Hannah. Josh said his shoe was exactly a foot long.

Who needs to take the fewest steps to walk his or her track? Explain how you found your answer.

How many more steps do the two others need to take to finish their races?

Who do you think will win the race? Who will take the longest to finish? Explain your reasoning.