

# WRITE A SYSTEM OF EQUATIONS IN 11 UNKNOWNNS MOTORCYCLE

numbers) can be used to write systems of linear equations in compact form. We begin by considering a system of two linear equations in two variables. Recall ..  $2x + 4y = 5$   $x + 3y = 1$ . Determine the value of  $k$  for which the system of linear equations MARKET SHARE OF MOTORCYCLES The market share of.

So you have this one adult right over here that brought four children. So multiply both sides by 12 over 11, 12 over 11, what we get, these cancel out, what we get is that B, so I'll do this in this color, B is equal to, let's see, I have a 12 in the numerator two in the denominator so I can make that a six and a one, then I have a 55 and 11, I can divide both by 11, so it's gonna be five and a one. So this is the total amount of ticket sales from the adults with two children. So the distance walking is W kilometers W kilometers divided by his rate, the distance divided by your rate is gonna give you your time, so let's see, his rate is five kilometers per hour, five kilometers per hour and so you're gonna have kilometers cancel kilometers and if you divide by or if you have one over hours in the denominator, that's going to be the same thing, this is gonna be W over five hours, so the units work out. And if you're under time pressure, you can see there is only one choice that has seven adults, so you could just pick that one. Adults with two children, that's r. Let's call that, Let's call that B and so what do we know? So let's just say r is I could say the remaining number of adults or the number of adults with two children. Now what's an easy thing to do? So this right over here, this distance, right over here, that is W and the rest of the distance, he covered by the bus, so the rest of this distance, all of this distance right over there, that is going to be B. And then there's some remaining number of adults that brought two children. So we could just look at these choices, only one of these choices have seven adults. How much are they going to spend? There's six adults with two children, but there's another adult. At one showing of the play, one adult brought four children and the remaining adults brought two children each. So there's a total of seven adults, seven adults total. This is going to be five kilometers, W, let me write this, W is equal to five kilometers. So the total amount of time is going to be one and half hours, so we'll just write that over here. Let's me just write it this way. And we could verify that this would also amount to 16 children because this person up here, in magenta, they would bring four children, so you would have four children plus six adults brought two children, so six adults bringing two children each, that would amount to 12 children.