

- 1) Mark and his son John are going fly-fishing in Idaho and want to buy an equipment locker for their truck so they can store their fishing rods in it. If the dimensions of one model of equipment locker are 4.5 feet by 1.5 feet by 1.75 feet, what is the longest fishing rod that will fit? Support your answer with a short explanation stating how they can fit the rods into the locker and by showing your work.



- 2) The flatbed of their pickup truck can accommodate an equipment locker that fits snugly against the cab. Because of this, any equipment locker they buy has to have a width of four and a half feet, but the depth and the height can vary. Mark and John would like to buy new fly fishing rods. One model of rod is five and a half feet long and another is six feet long. Fill in the missing dimensions with measurements to the nearest half inch for the equipment locker in the tables below.



<i>Length of rod</i>	<i>Width of locker</i>	<i>Depth of locker</i>	<i>Height of locker</i>
5.5 feet	4.5 feet	2 feet	
5.5 feet	4.5 feet	2 feet 3 inches	
5.5 feet	4.5 feet	2 feet 6 inches	
5.5 feet	4.5 feet	2 feet 9 inches	

<i>Length of rod</i>	<i>Width of locker</i>	<i>Depth of locker</i>	<i>Height of locker</i>
6 feet	4.5 feet		1 foot 4 inches
6 feet	4.5 feet		1 foot 7.5 inches
6 feet	4.5 feet		1 foot 10.5 inches
6 feet	4.5 feet		26 inches

- 3) The rod that Mark and John would really like to take on their fishing trip is the FlyPro FlexMaster which is six and a half feet long. Given the fact that the equipment locker cannot be wider than four and a half feet and that they want to store the rods in the locker when they are on the road, they are trying to determine different size lockers that might work so they can decide whether or not to buy the longer fishing rod. Find some possible combinations of depth and height that will accommodate the FlyPro FlexMaster.



<i>Length of rod</i>	<i>Width of locker</i>	<i>Depth of locker</i>	<i>Height of locker</i>
6.5 feet	4.5 feet		
6.5 feet	4.5 feet		
6.5 feet	4.5 feet		
6.5 feet	4.5 feet		