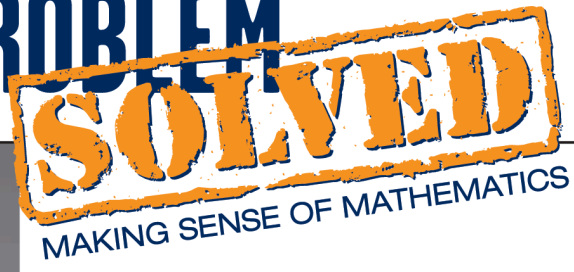


1. John and Silvia want to make a scale model of our solar system. Based on the size of the ball they picked for the sun, the scale of the model will be 69,600 km to 1 inch. The diameter of Jupiter is 142,984 km. What should be the diameter of the ball that represents Jupiter?

If Earth has a diameter of 12,756 km, what should be the diameter of the ball that represents Earth?

2. In *Gulliver's Travels*, Gulliver travels to Brobdingnag. If a pencil is 7 inches in Ourland (the real world), the pencil is 84 inches, or 7 feet, in Brobdingnag. Based on this information, what is the scale factor between Ourland and Brobdingnag?

If a soccer field in Ourland is 75 yards wide and 120 yards long and covers an area of 9,000 square yards, what would be the area of a similar soccer field in Brobdingnag?



3. Gulliver also traveled to Lilliput. If the scale factor between Lilliput and Ourland is 1:12, how long would a bed be in Lilliput if it is 80 inches long in Ourland?

How long would the bed be in Brobdingnag?