Answer on question #58748, Physics / Other

Question A basketball referee tosses the ball straight up for the starting tip-off. At what velocity must a basketball player leave the ground to rise 1.25 m above the floor in an attempt to get the ball?

Solution Mass is This can be found from conservation energy law:

$$mgh = mv^2/2$$

$$v = \sqrt{2gh} = \sqrt{2 \cdot 9.8 \cdot 1.25} \approx 4.95\, m/s$$