

Sharing the Royal Stallions

Problem-of-the-Week

The Problem

The king of a small European monarchy wants to divide 11 horses in the royal stable among his three children. The oldest child is to receive $\frac{1}{2}$ of the horses, the middle child is to receive $\frac{1}{4}$ of the horses, and the youngest is to get $\frac{1}{6}$ of the horses. The workers in the stable cannot think of a way to divide the 11 horses among the three children according to the king's wishes. While they are working on the problem, the king rides up on his own horse and says, "Now that I am here, I can help you. If you think about it, now your problem should be easy."



Strategies and Hints

1. How is the king able to help the workers?
2. Is it important that the king rode up on his horse?
3. How many horses are needed so that the worker can give the children $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{6}$ of the total?