

# HOW'S YOUR HORSEPOWER?

Before engineers harnessed energy to work for us in machines, horses were a common source of power. In the late 18th century, one inventor, James Watt, compared the power of his steam engine to the more familiar power of a horse. He found that a powerful work horse could raise a 1,000 pound weight 33 feet in one minute. Today the term "horsepower" is still used to describe the strength of motors and engines.



## TEST YOUR HORSEPOWER

If a 100-pound person raised his or her weight 330 feet in one minute, that person would use one horsepower. People can raise their own weight by climbing stairs. So, if each step is eight inches high, and the 100-pound person runs up 495 steps in one minute, that person will use one horsepower. To determine how many eight-inch steps you would need to run in one minute, calculate:

$$33,000 \div \text{your weight} = (\text{answer})$$

$$(\text{Answer}) \times 1.5 = \text{number of steps to run}$$