## Math: plane and simple The Garden



Plane and Simple are putting in a circular garden in their yard. The diameter of the outer circle is four times the diameter of the inner circle. The lengths of the walkways are 12 feet long. Find the diameter of the inner circle.


## Adventures of the Illuminauts

Once Dragon Lily got to Virus City she needed to decode her secret mission message. Virus City is planning to attack the Neuro pathways and disrupt the thought waves of the Grand Designer.

Virus City is planning to attack the Neuro pathways and disrupt the thought waves of the Grand Designer. You are to make contact with our agent inside the city. Locate the point $(x, y)$. Use these equations to find the meeting point.
$3 x+5=5 x-11 \quad 5(2 y-7)=4 y+19$


Plot the point and say what part of Virus City the Meeting Point is located.

## THE MATH LABORS OF HERCULES LABOR 1

The first labor of Hercules involved the slaying of a ferocious lion. The beast has been terrorizing the land of Nemea. The Nemean Lion was said to have skin that no weapon could pierce. Hercules tracked it to its cave and fought it. He shot it with his bow but the arrows bounced off of it. He was forced to strangle the monster. He used its own claws to cut its skin and wore the skin as a coat.


An average lion kills about 15 times a year. The Nemean Lion killed 36 of the villagers' livestock every year. What percent is that in comparison to the average lion?


The Nemean Lion consumed 12 kg of meat a day. What percent of its body weight is that? Assume


After Hercules killed the lion, he returned to King Eurystheus (pronounced yoo-ris-thee-uhs). The king was so afraid of Hercules he hid in a huge jar and sent his heralds to talk to Hercules instead. The jar was buried so that only $30 \%$ of it was above the ground. If 30 inches of the jar was above the surface how tall in feet was the entire jar?


