SYSTEM OF EQUATIONS-WORD PROBLEMS #2

Directions: Find the answers to each situation below by setting up and solving a system of equations.

1) Ben bought a total of 11 pizzas for his class party. The amount of large pizzas was one less than twice the amount of medium pizzas. How many large and how many medium pizzas did he buy?

\[
\begin{align*}
m + L &= 11 \\
L &= 2m - 1
\end{align*}
\]

2) Ashley and her brother combined to read a total of 33 books over the summer. Sophia read three more than four times as many books as her brother. How many books did each person read?

\[
\begin{align*}
s &= \\
b &=
\end{align*}
\]

3) Angle X and Angle Y are supplementary angles. Angle X is sixteen degrees more than three times the size of Angle Y. What are the measures of Angle X and Angle Y?

\[
\begin{align*}
x &= \\
y &=
\end{align*}
\]

4) The sum of Alyssa's age and her sister's age is 48 years. Emma age is 6 years less than twice here sister’s age. What is Emma’s age, and what is her sister’s age?

\[
\begin{align*}
e &= \\
s &=
\end{align*}
\]

5) Ryan has a mix of action and sports games for a total of 39 video games. His action collection is three more than half his sports collection. How many action games and how many sports games does he have?

\[
\begin{align*}
a &= \\
s &=
\end{align*}
\]

6) The perimeter of a rectangle is 162 cm. The length of the rectangle is eleven centimeters more than four times the size of the width. What is the length and width of the rectangle?

\[
\begin{align*}
L &= \\
W &=
\end{align*}
\]