Fill in the table

1. A number: x	Double the number	Double the number, decreased by 31.
2. A number: x	Three times the number	Three times the number, increased by 17.
3. A number: x	The sum of the number and 5	Twice the sum of the number and 5.
4. A number: x	The difference of the number and 11	Seven times the difference of a number and 11.
5. A number: y	The difference of 20 and the number	The difference of 20 and the number, divided by 3.
6. A number: y	The sum of – 10 and the number	The sum of – 10 and the number, divided by 9.

1) Three times a number, minus 6, is the same as two times a number, plus 3. Find the number.

2) Three times a number, decreased by 4, is the same as double the difference of the number and 1.

3) A 45-inch board is to be cut into two pieces so that the longer piece is 4 times the shorter. Find the length of each piece.

 4) In 2011, there were 9 fewer Democratic State Governors than Republican State Governors. Find the number of State Governors from each party. Rhode Island had an independent governor, so use a total of 49, representing the other 49 states.

5) The left and right page numbers of an open book are two consecutive integers whose sum is 469. Find these pages.

6) A 46-foot piece of rope is cut into three pieces so that the second piece is three times as long as the first piece, and the third piece is two feet more than seven times the length of the first piece. Find the length of the pieces.