## **COMPOUND INEQUALITIES – HOMEWORK**

Solve and graph the following inequalities. Write your answers in interval notation.	
$ ) 3x - 4 \le 5 \text{ or } 2x - 6 > 6$	2) $-5 \le 3 - 2x < 11$
$(3) -3 < 3 + m \le 7$	4) 2 <i>r</i> + 8 > 16 − 2 <i>r</i> and 7 <i>r</i> + 21 < <i>r</i> − 9
5) $3n + 10 \le 13 \text{ or } 2n \ge 5n - 12$	6) $4m - 5 > 7 \text{ or } 4m - 5 < -9$
7) 10 – 2 <i>p</i> > 12 and 7 <i>p</i> < 4 <i>p</i> + 9	8) 6 – <i>c</i> > <i>c</i> or 3 <i>c</i> – 1 < <i>c</i> + 13
9) The sum of four times a number and eight is between zero and twelve.	10) About 20% of the time you sleep is spent in rapid eye movement (REM) sleep, which is associated with sleep. If an adult sleeps 7 to 8 hours, how much time Is spent in REM sleep?