Worksheet on Solving inequalities (Section 2.7)

Solve and write answers in both interval and inequality notation

(1) $4x + 8 \geq x - 1$

(2) $(x - 3)(x + 4) < 0$

(3) $|x - 5| < 3$

(4) $|t - 3| > 4$

(5) $x^2 - 5x + 3 > 0$

(6) The compound inequality: $24 \leq \frac{2}{3}(x - 5) \leq 36$

(7) Replace the question mark by $<$ or $>$ and explain why your answer makes sense

   (a) if $a - b = 1$ then $a?b$

   (b) if $u - v = -2$ then $u?v$

   (c) if $a < 0$,$b < 0$ and $\frac{b}{a} > 1$ then $a?b$

   (d) if a is positive, b is positive and $\frac{a}{b} > 1$ then $a?b$