Solving inequalities

Name - _ _ _ _ _ _ _ _ Start time - _ _ : _ _ End time - _ _ : _ _

Solve the following inequalities.

Solve the following inequalities. Show each solution on a number line.

a) $7 < x + 3 \leq 15$
b) $2 \leq x-4 \leq 12$
c) $-1 \leq x + 5 \leq 4$
d) $21 \leq x-16 \leq 44$

Solve the following inequalities, giving your answers using set notation.

a) $16 < 4x < 28$
b) $32 < 2x \leq 42$
c) $27 < 4.5x \leq 72$
d) $-22.5 \leq 7.5x < 30$

Solve the following inequalities:

a) $8 < 3x - 4 \leq 26$
b) $-42 < 7x + 7 \leq 91$
c) $5.1 \leq -x + 2.5 < 9.7$
d) $5.6 < -x -6.8 < 12.9$
e) $17 < 6x + 5 < 29$
f) $-2 < 2x + 3 < 5$

Find the integer solutions that satisfy both of the inequalities.
a) $24 > 8x$ and $9x -18$
b) $-3 > 2x + 5$ and $-4x \leq 32$
c) $9 – x > 8x + 9$ and $2x + 9 > 3$