

# Questions - Linear inequalities

**1** Solve these inequalities.

**a**  $4x > 16$       **b**  $5x - 7 \leq 3$       **c**  $1 \geq 3x + 4$

**d**  $5 - 2x < 12$       **e**  $\frac{x}{2} \geq 5$       **f**  $8 < 3 - \frac{x}{3}$

**2** Solve these inequalities.

**a**  $\frac{x}{5} < -4$       **b**  $10 \geq 2x + 3$       **c**  $7 - 3x > -5$

**3** Solve

**a**  $2 - 4x \geq 18$       **b**  $3 \leq 7x + 10 < 45$       **c**  $6 - 2x \geq 4$

**d**  $4x + 17 < 2 - x$       **e**  $4 - 5x < -3x$       **f**  $-4x \geq 24$

**4** Solve these inequalities.

**a**  $3t + 1 < t + 6$       **b**  $2(3n - 1) \geq n + 5$

**5** Solve.

**a**  $3(2 - x) > 2(4 - x) + 4$       **b**  $5(4 - x) > 3(5 - x) + 2$

## Extend

**6** Find the set of values of  $x$  for which  $2x + 1 > 11$  and  $4x - 2 > 16 - 2x$ .