# STEP 9 : SIMPLE INEQUALITIES

Solve

1) $x + 3 > 7$

$-3$ $-3$

$x > 4$

2) $x - 5 \geq 10$

$+5$ $+5$

$x \geq 15$

3) $6x \leq 12$

$\div 6$

$x \leq 2$

4) $-3x \geq 12$

$\div -3$

$x \leq -4$

# STEP 10 : FORM & SOLVE INEQUALITIES

Three more than double my number is greater than 10.

Form an inequality & solve.

$2x + 3 > 10$

$2x > 7$

$x > 3.5$

# STEP 11 : UNKNOWNS ON BOTH SIDES

1) $2x + 1 = 4x - 3$

$4 = 2x$ $x = 2$

2) $6x + 2 = 2x + 14$

$4x = 12$

$x = 3$

3) $7x + 9 = 2x - 16$

$5x = -25$

$x = -5$

4) $5(x+3) = 3(x+9)$

$5x + 15 = 3x + 27$

$2x = 12$

$x = 6$

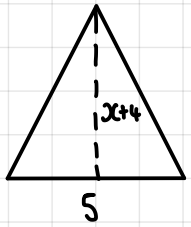
5) $2(9 - x) = 3(x + 16)$

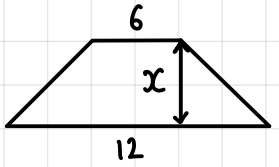
$18 - 2x = 3x + 48$

$-30 = 5x$

$x = -6$

# STEP 12 : COMPLEX EQUATIONS/INEQUALITIES




The area of the trapezium is double the area of the triangle. Work out the area of both shapes.

$x = 5$