

## SOLUCIONES EJERCICIOS REPASO

29. Reduce.

a)  $(x+1) \cdot (2x+3) - 2 \cdot (x^2+1) = 2x^2 + 3x + 2x + 3 - 2x^2 - 2 = \boxed{5x + 1}$

b)  $(2x-5) \cdot (x+2) + 3x \cdot (x+2) = 2x^2 + 4x - 5x - 10 + 3x^2 + 6x = \boxed{5x^2 + 5x - 10}$

c)  $(x^2-3)(x+1) - (x^2+5)(x-2) = x^3 + x^2 - 3x - 3 - (x^3 - 2x^2 + 5x - 10) =$   
 $= x^3 + x^2 - 3x - 3 - x^3 + 2x^2 - 5x + 10 = \boxed{3x^2 - 8x + 7}$

c)  $(4x+3)(2x-5) - (6x^2-10x-12) = 8x^2 - 20x + 6x - 15 - 6x^2 + 10x + 12 =$   
 $= \boxed{2x^2 - 4x - 3}$

37.

a)  $\frac{x^2-9}{x^2-6x+9} = \frac{(x+3)(x-3)}{(x-3)^2} = \boxed{\frac{x+3}{x-3}}$

b)  $\frac{5x+15}{x^2+6x+9} = \frac{5(x+3)}{(x+3)^2} = \boxed{\frac{5}{x+3}}$

c)  $\frac{3x+3}{3x^2-3} = \frac{3(x+1)}{3(x^2-1)} = \frac{x+1}{(x+1)(x-1)} = \boxed{\frac{1}{x-1}}$

d)  $\frac{x^2+2x+1}{5x^2+5x} = \frac{(x+1)^2}{5x(x+1)} = \boxed{\frac{x+1}{5x}}$

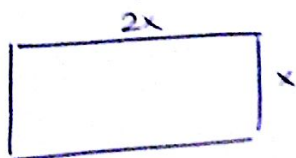
e)  $\frac{2x^2-6x}{2x^3-12x^2+18x} = \frac{2x(x-3)}{2x(x^2-6x+9)} = \frac{(x-3)}{(x-3)^2} = \boxed{\frac{1}{x-3}}$

f)  $\frac{3x^2+6x+3}{5x^2+5x} = \frac{3(x^2+2x+1)}{5x(x+1)} = \frac{3(x+1)^2}{5x(x+1)} = \boxed{\frac{3(x+1)}{5x}}$

Pág 144

7

Perímetro = 150 m



La suma de todos los lados suman 150

$$x + x + 2x + 2x = 150$$

$$6x = 150$$

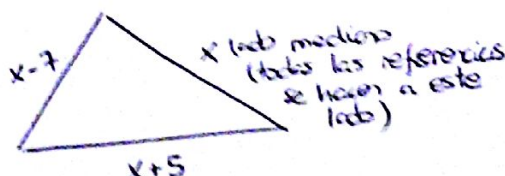
$$x = 25 \text{ m}$$

solución:

$\boxed{25 \text{ m y } 50 \text{ m}}$

8

Perímetro = 52 cm



$$x + (x+5) + (x-7) = 52$$

$$3x - 2 = 52$$

$$3x = 54$$

$$x = 18 \text{ cm}$$

Solución:

$\boxed{11 \text{ cm, } 18 \text{ cm y } 23 \text{ cm}}$