Forming equations and finding the unknown.

Example: Find the value of x in the figure.

	Opposite sides of a rectangle are eqaul
(2x - 1)cm $\quad$ (x + 1)cm $\quad$ (x + 3)cm	$2x - 1 = x + 3$ $\qquad$ $2x - x = x - x + 4$ $2x - 1 + 1 = x + 3 + 1$ $\qquad$ $x = 4\ cm$ $2x = x + 4$

Exercise 14:37

Form equations and find x

(1) $2x$ $\qquad$ 8 cm

(2) $5x$ $\qquad$ $2x$ $\qquad$ 10cm

(3) $3y$ $\qquad$ 9cm

(4) 3xcm $\qquad$ 15cm $\qquad$ 2x + 5 cm

(5) $x + 25°$ $\qquad$ 75°

(6) x $\qquad$ 8cm $\qquad$ 6cm $\qquad$ 12cm

(7) $3x - 2cm$ $\qquad$ 2x+2cm $\qquad$ 2x+3cm

(8) $x + 4cm$ $\qquad$ 2x − 4cm

(9) $4x$ $\qquad$ 3x+ 4cm

(10) x $\qquad$ 8 $\qquad$ 3cm $\qquad$ 6 cm

(11) $3x - 3$ $\qquad$ 2x + 4

(12) $2x$ $\qquad$ 60°

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MORE ACTIVITY

1. Study the figure below and use it to answer the questions that follow.

$(2h + 18)$ dm

$-h$ dm

figure.

$(4h + 2)$ dm
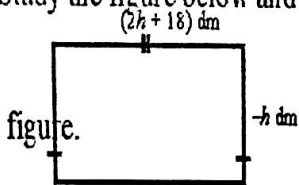
a) Find the value of h.
b) Work out the width and length of the figure.

c) Calculate the area of the figure.
d) Find the distance round the figure.

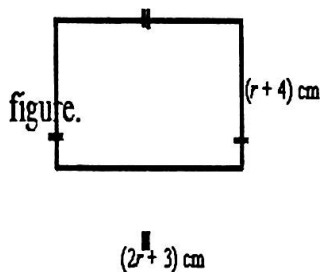2. Study the figure below and use it to answer the questions that follow.

$4(3n - 6)$ m

$3(2n - 2)$ m

$2(2n + 3)$ m
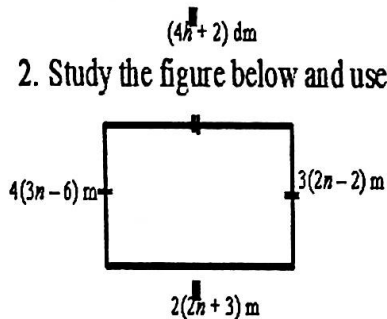
a) Find the value of n.
b) Work out the width of the figure.
c) Calculate the area of the figure.
d) Find the perimeter of the figure.

3. The sides of a rectangle are in the order of $(x + 6)$ cm, $(x - 2)$ cm and $3(x - 4)$ cm.
   a) Find the area of the figure.
   b) Calculate its perimeter.

4. The perimeter of the figure below is 50 cm. Use it to answer the questions that follow.

$(r + 4)$ cm

figure.

$(2r + 3)$ cm

a) Find the value of r.
b) Work out the width and length of the figure.

c) Calculate the area of the figure.

5. Study the figure below and use it to answer the questions that follow.

$3(x - 2)$ m $(x + 8)$ m

$(x + 2)$ m

$(3x + 3)$ m
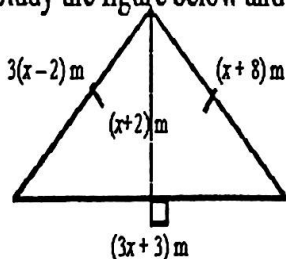
a) Find the value of x.
b) Work out the height of the figure.
c) Calculate the area of the figure.
d) Find the distance round the figure.