

Find the value of y .

$$5y + 1 = 31$$

6

$$9 = 2y + 8$$

0.5 or $\frac{1}{2}$

$$3y - 3 = 9$$

4

$$10y - 2 = 48$$

5

$$4y - 10 = 30$$

10

$$4 + 3y = 28$$

8

Dani thinks of a number.

She doubles it and adds 3

She gets the answer 15

a) Write an equation to represent Dani's problem.

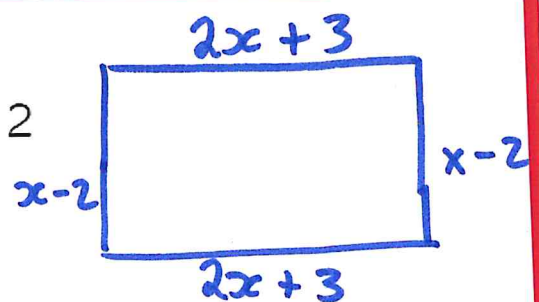
$$\underline{2x + 3 = 15}$$

b) Solve the equation to find her number. 6

The length of a rectangle is $2x + 3$

The width of the same rectangle is $x - 2$

The perimeter is 17 cm.



Find the area of the rectangle.

$$8 \times 0.5 = 4 \text{ cm}^2$$

$$6x = 15$$

$$\begin{array}{r} 02.5 \\ 6 \overline{) 15.30} \end{array}$$

$$\text{Length} = 8 \quad \text{width} = 0.5$$

$$6x + (6 - 4)$$

$$6x + 2 = 17$$

$$17 - 2 = 15$$



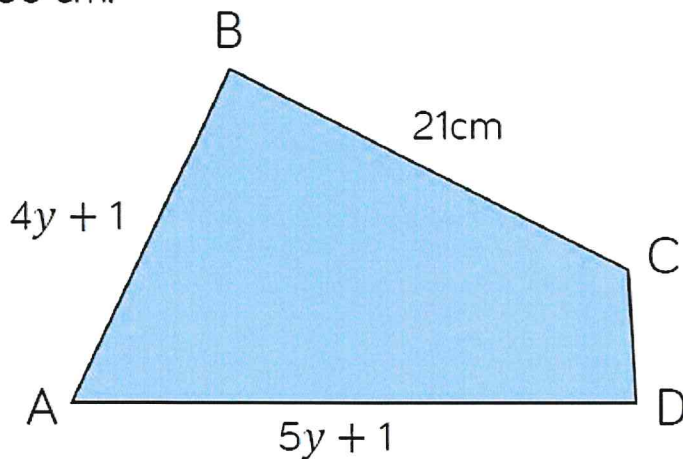
Work out the cost of one banana and one orange.

$$\begin{array}{r} \text{Banana} = 1.52 \\ - 1.20 \\ \hline 0.32 \\ \hline 32p \end{array}$$

$$\begin{array}{r} \text{Orange} = 2 \text{ bananas} \\ = 64p \\ \begin{array}{r} 0.11 \\ 1.20 \\ - 0.64 \\ \hline 0.56 \end{array} \quad 28p \\ \hline 0.56 \div 2 = 0.28 \end{array}$$

Here is the quadrilateral ABCD.

The perimeter of the quadrilateral is 80 cm.



$$4y + 1 = 21$$

$$4y = 20$$

$$y = 5$$

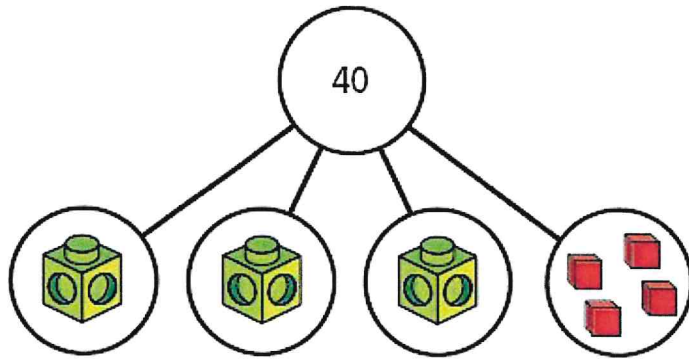
$$\begin{array}{l} AB = 21 \\ BC = 21 \\ AD = 26 \end{array} \left. \vphantom{\begin{array}{l} AB \\ BC \\ AD \end{array}} \right\} 68$$

$$CD = 80 - 68 = 12 \text{ cm}$$

AB is the same length as BC.

Find the length of CD. **12cm**

If each multilink cube represents x , form and solve an equation to find the value x .



$$3x + 4 = 40$$

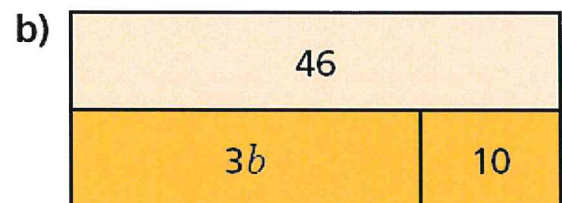
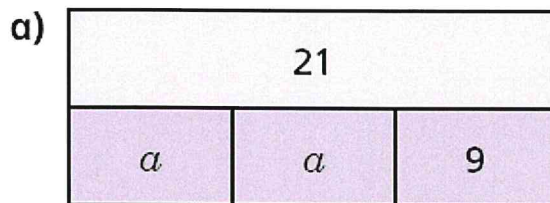
$$40 - 4 = 36$$

$$36 \div 3 = 12$$

$$x = \boxed{12}$$

Write an algebraic equation to represent each bar model.

Find the values of a and b .



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$$3y - 3 = 9$$

4