

8B: Collecting like terms

1 Simplify these expressions.

a $b + b + b$

b $7c + 2c$

c $10a + 3a$

d $5e - 2e$

e $8t - 6t$

f $12p - p$

2 Simplify these.

a $5x + 2x + 3x$

b $8y - 2y + y$

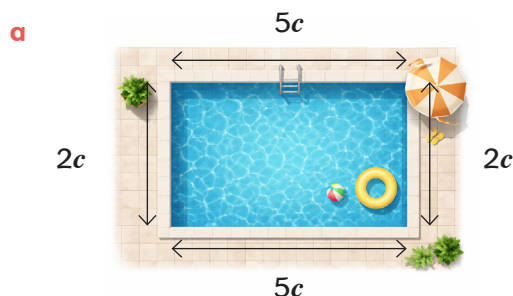
c $15g - 4g - 7g$

d $3m - 5m$

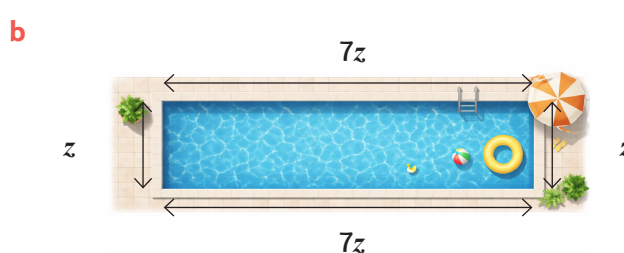
e $-4f - 6f$

f $-7d + 11d$

3 Write an expression for the perimeter of these swimming pools.



Perimeter =
=



Perimeter =
=

4 Circle like terms in different colours. Then simplify.

a $4a + 2b + 3a + 7b$ = +

b $3x + 5y + 6y + 2x$ = +

c $7g - 9h + 2g + 5h$ =

d $15c + 8d - 5c - d$ =

e $11p + 3r - 7r + 3p$ =

f $7e + 20 + 4 + 4e$ =

g $6m + 3 + 2m - 5$ =

h $-9h + 8 - 6h - 3$ =

Remember to include the + or - sign in your circle.



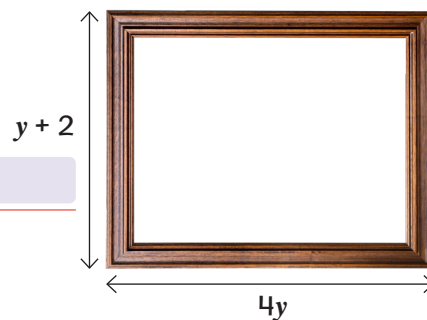
5 Write an expression for the perimeter of this artwork.



Perimeter =
=

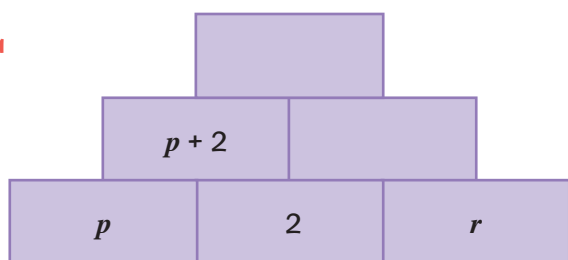
- 6 Jodi makes this wooden frame.
Write an expression for how much wood is needed to make the frame. Simplify your expression.

Amount of wood =
=

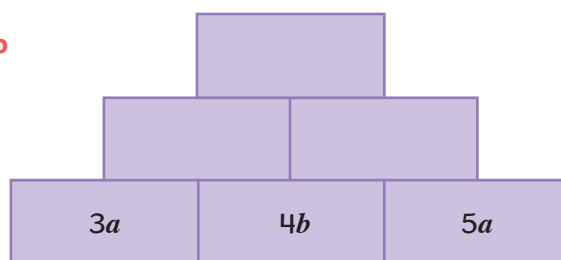


- 7 The expression in each box is found by adding the numbers in the two boxes below it.
Fill in the missing expressions.

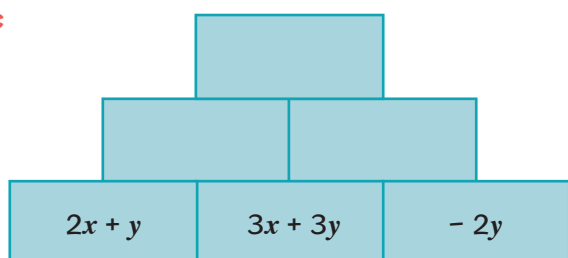
a



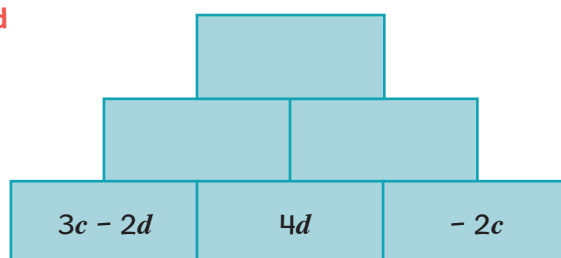
b



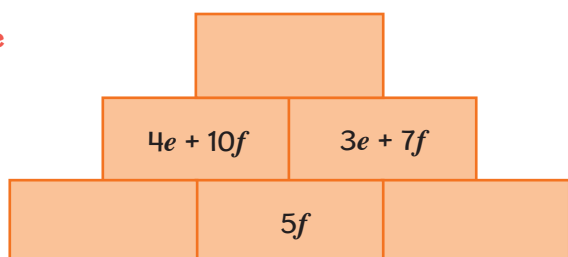
c



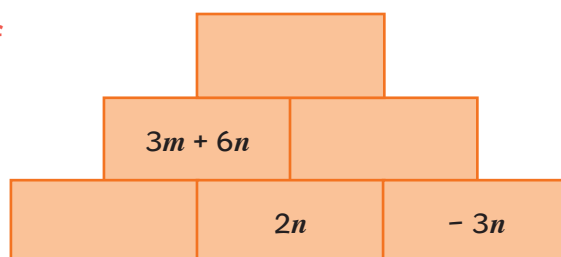
d



e



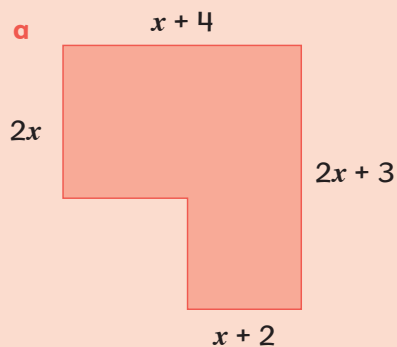
f



Challenge

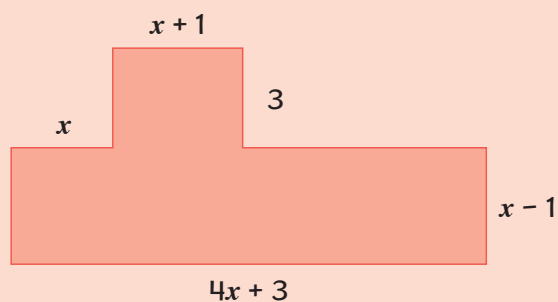
- 8 Find the perimeter of these shapes.

a



$P =$

b



$P =$