

Mathematics

Expressions, equations and inequalities

Collecting like terms

Independent Task

Ms Jones



Try this

What is the same and what is different about the expressions below?
Which expression do you think is written the simplest?

$$9 + 9 + 9 + 9 + 9$$

$$3 \times 9 + 2 \times 9$$

$$5 \times 9$$

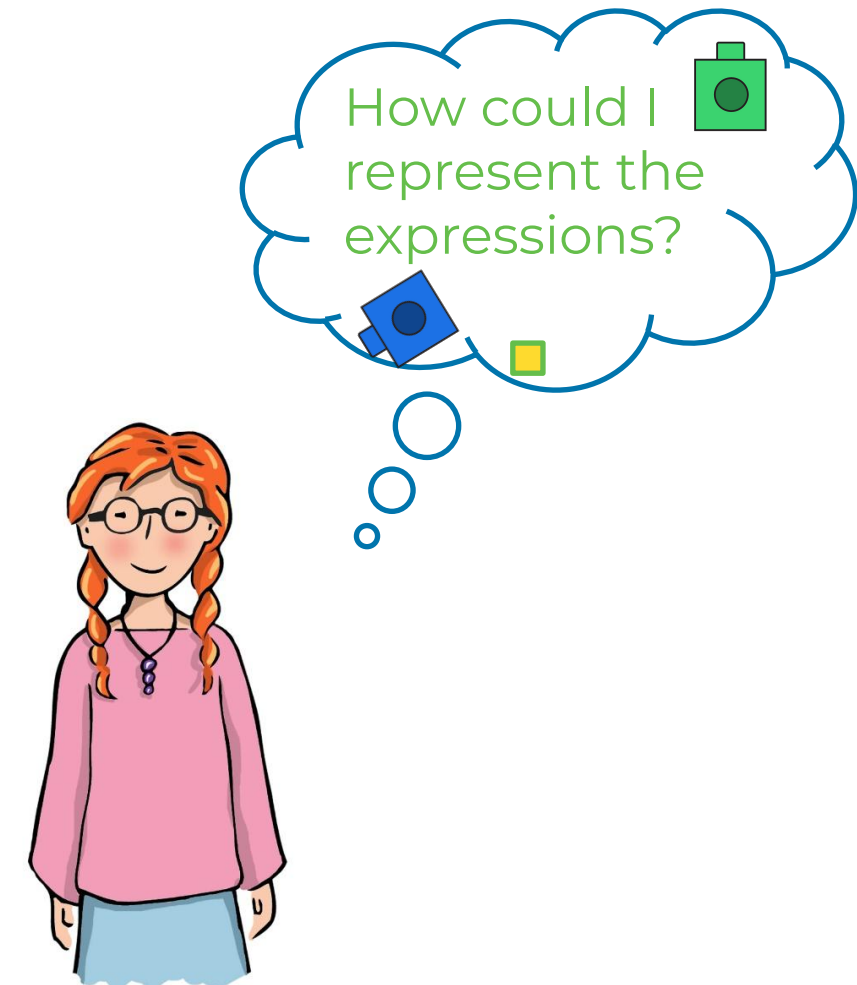
$$6 \times 9 - 9$$

$$a + a + a + a + a$$

$$3a + 2a$$

$$5a$$

$$6a - a$$



Independent task

1. Re-write the expressions below as simply as possible by collecting like terms.

a) $2a + 5 + 3a - 2$

b) $2a + 6b - a - 4b$

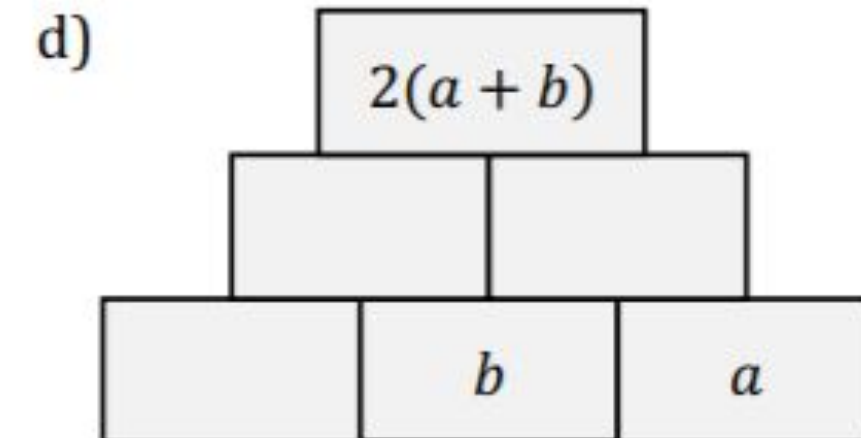
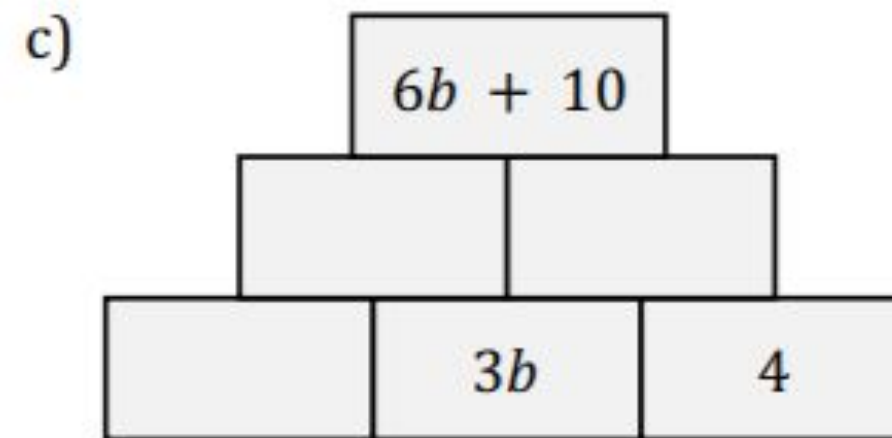
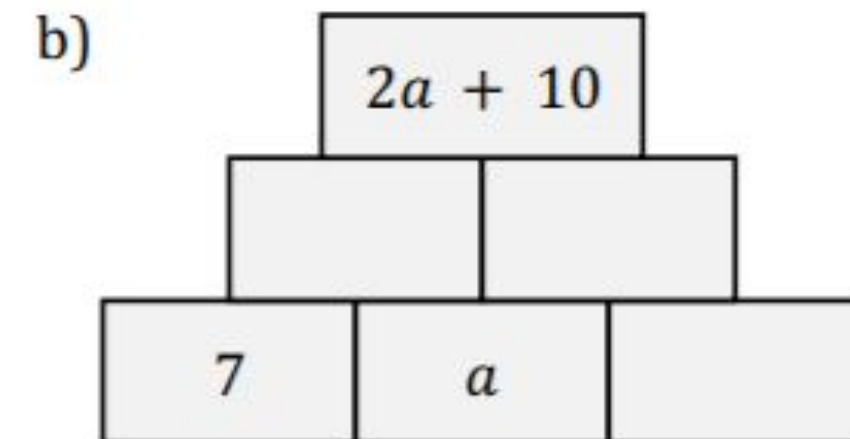
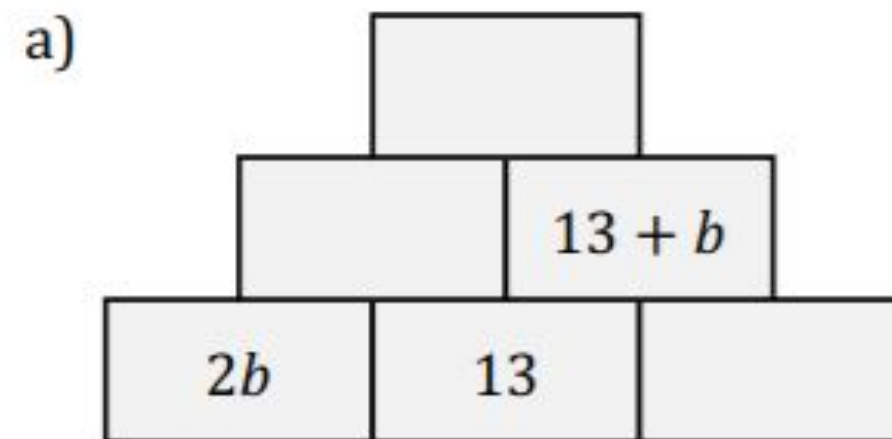
c) $4 - 2a + 7a - 1$

d) $6b + 3a - 5 - 2a + b$

e) $4b - a + b - 1 - 4a$

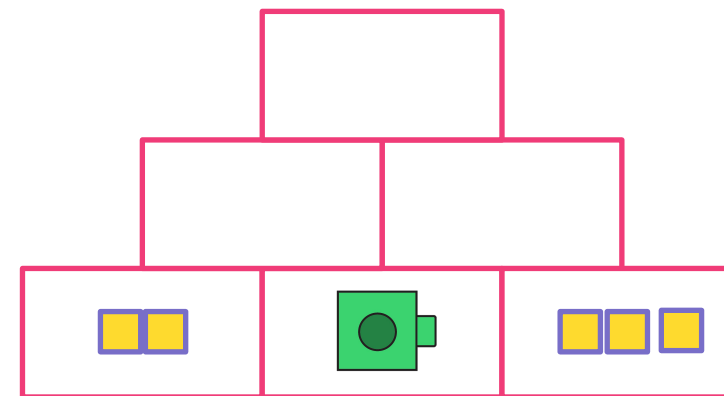
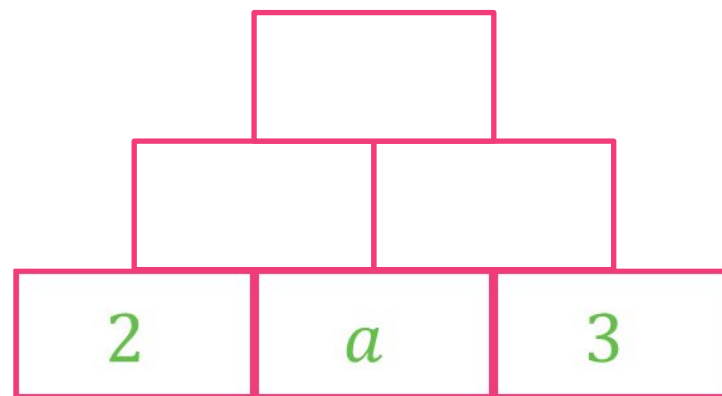
f) $12 - 2a - 7b - a + 4 + 3a$

2. Each brick in the pyramids to the right is completed by summing the values in the two bricks beneath. Copy and complete the pyramids.

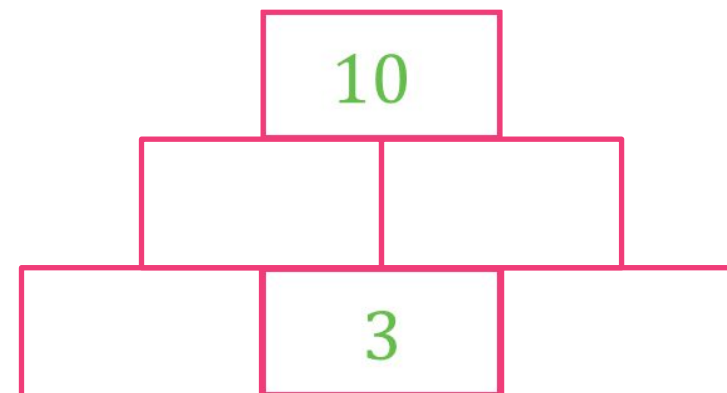


Explore

How can you complete the addition pyramids?



What could the values of the missing bricks be in this addition pyramid?



How many different possibilities can you find for the bottom row?

