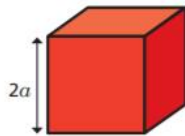


TUESDAY LEVEL 3 REASONING AND PROBLEM SOLVING WEEK 7

- 7 Dexter builds a tower.
Each block is $2a$ high.
He uses 7 blocks.

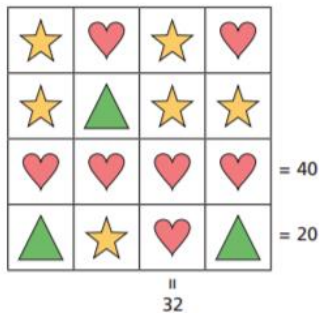


The total height of his tower is 42 cm.

Write an equation to represent the height of Dexter's tower and find the value of a .

$$a = \boxed{} \text{ cm}$$

- 8 Work out the value of each shape.
Write the equations that you solved to find the value of each shape.



♥ = ★ = ▲ =

Work out the missing total of each row and column.
Compare answers with a partner.

7a. Graham is solving the equation $d^2 = 1$.

Graham says,



$d = 0.5$ because
 $0.5 + 0.5 = 1$.

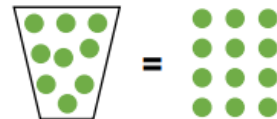
Is he correct? Explain your answer.



R

8a. Amina has created a representation to help her solve the following equation:

$$b + 3 = 12$$



Is Amina correct? Convince me.



R

9a. Create three different equations that will balance the scale when $d = 7$.

Each equation must include a decimal number or fraction.

