

Homework/Extension

Step 3: Making Shapes

National Curriculum Objectives:

Mathematics Year 4: (4M7b) [Find the area of rectilinear shapes by counting squares](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Complete the missing rectangle using squares by counting the area.

Expected Complete the missing rectilinear shape using squares by counting the area.

Greater Depth Complete the missing rectilinear shape using half squares and squares by counting the area.

Questions 2, 5 and 8 (Varied Fluency)

Developing Create rectangles and squares using the statements by counting the area.

Expected Create rectilinear shapes using the statements by counting the area.

Greater Depth Create rectilinear shapes using the statements with half squares and squares by counting the area.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Explain and prove the correct statement by using squares to count the area of a rectangle.

Expected Explain and prove the correct statement by using squares to count the area of a rectilinear shape.

Greater Depth Explain and prove the correct statement by using squares and half squares to count the area of rectilinear shapes.

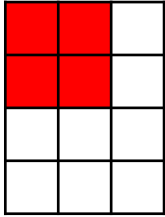
More [Year 4 Area](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

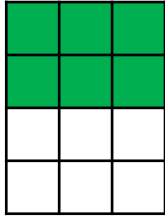
Making Shapes

1. Complete Shape C by drawing a rectangle, so that the area increases with each shape.

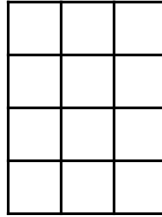
A.



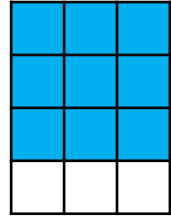
B.



C.



D.

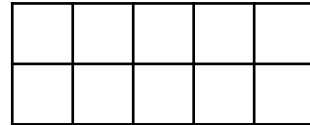


VF
HW/Ext

2. Make each of the shapes according to the statements.

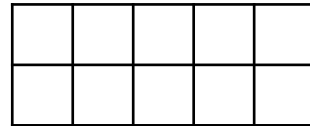
A.

A rectangle of 4 squares



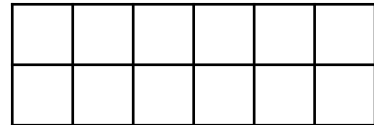
B.

A rectangle of 6 squares



C.

A rectangle of 10 squares



VF
HW/Ext

3. Deandra and Charlie are discussing making the following shape.



Deandra

I think I can make this shape using 8 squares.



Charlie

I think I can make this shape using 10 squares.

Explain who is correct. Prove it by making the shape.

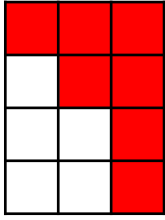


RPS
HW/Ext

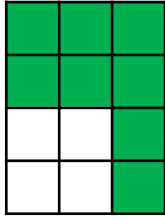
Making Shapes

4. Complete Shape C so that the area increases with each shape.

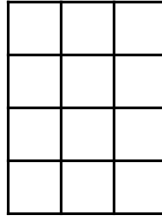
A.



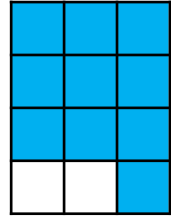
B.



C.



D.

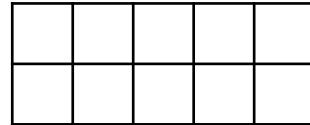


VF
HW/Ext

5. Make each of the shapes according to the statements.

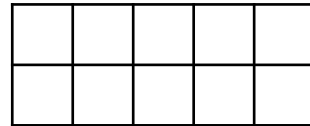
A.

5 squares



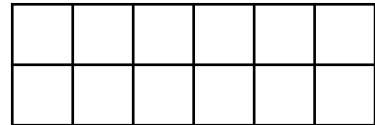
B.

7 squares



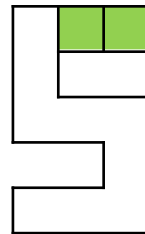
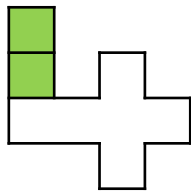
C.

9 squares



VF
HW/Ext

6. Tasha and James are discussing making the following shapes.



Tasha

I can make the number 5 with more squares than the number 4.



James

I can use the same amount of squares to make the number 4 and number 5.

Explain who is correct. Prove it by making the shape.

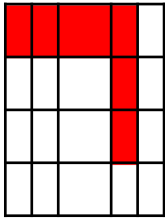


RPS
HW/Ext

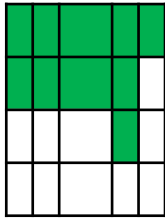
Making Shapes

7. Complete Shape C so that the area increases with each shape.

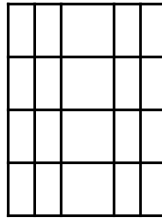
A.



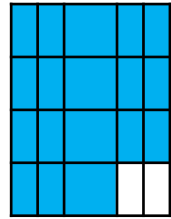
B.



C.



D.

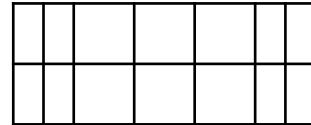


VF
HW/Ext

8. Make each of the shapes according to the statements.

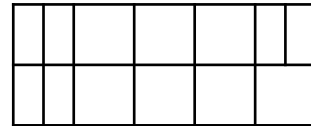
A.

5 squares and 3 half squares



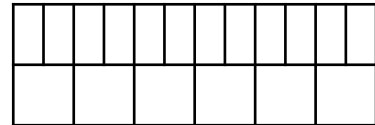
B.

7 squares and 2 half squares



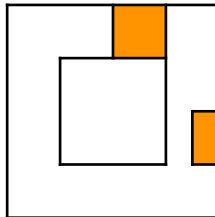
C.

6 squares and 4 half squares



VF
HW/Ext

9. Tommy and Keisha are discussing making the following shape.



Tommy

I can use 10 more squares and 1 half square to make this shape.



Keisha

I can use 7 more half squares and 6 squares to make this shape.

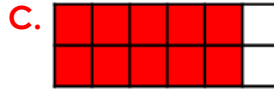
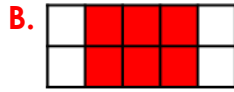
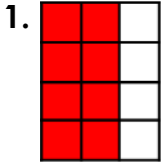
Explain who is correct. Prove it by making the shape.



RPS
HW/Ext

Homework/Extension Making Shapes

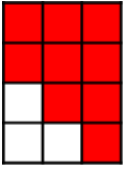
Developing



3. Both are correct. The rectangle could be $2 \times 4 = 8$ squares or $2 \times 5 = 10$ squares.

Expected

4. Various answers, for example:



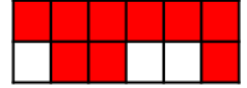
5a. Various answers, for example: A.



B.



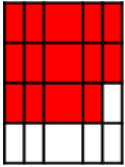
C.



6. Tasha is correct. The number 5 would use 11 squares whilst the number 4 would only use 8.

Greater Depth

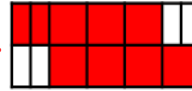
7. Various answers, for example:



8a. Various answers, for example: A.



B.



C.



9. Tommy is correct because he can use 10 more squares and 1 half square to complete the shape:

