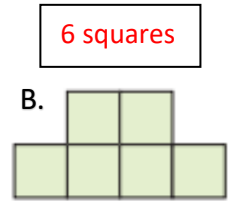
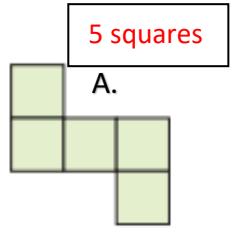


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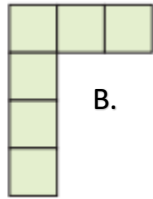
Maths Tasks – Blue Challenge

1. Find the area of both rectilinear shapes, in squares.
Which shape has the **larger** area?

Shape B has the larger area as 6 squares is greater than 5.



7 squares

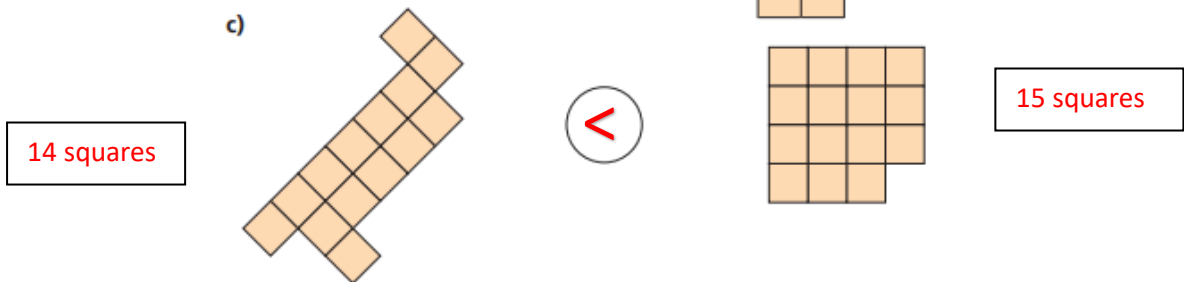


6 squares

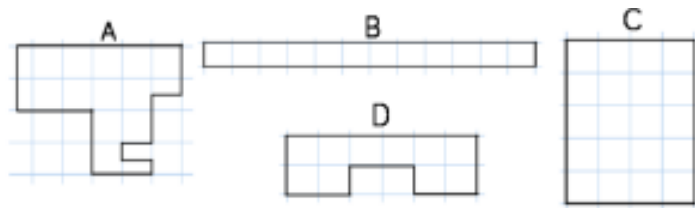
2. Find the area of both rectilinear shapes, in squares.
Which shape has the **smaller** area?

Shape B has the smaller area as 6 squares is less than 7 squares.

3. Find the area of these shapes, in squares. Then write $>$, $<$ or $=$ to compare the area of the shapes.



4. Put the shapes in order from the smallest to the largest area.



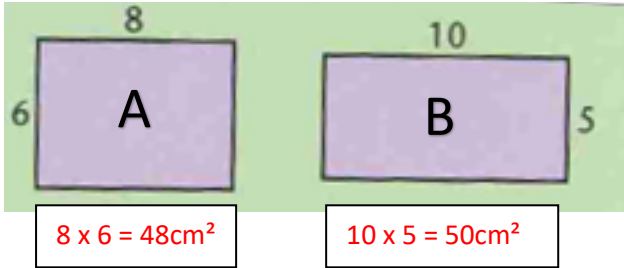
Smallest area D B A C Largest area

20/01/21

Maths Tasks – Green Challenge

For each of the following pairs of diagrams, work out which rectangle has the larger area and by how much.

All lengths are in centimetres.

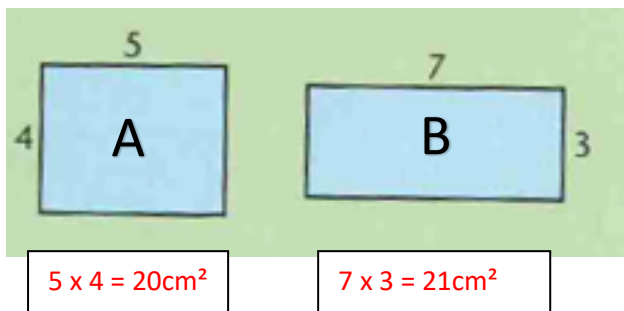


$$8 \times 6 = 48\text{cm}^2$$

$$10 \times 5 = 50\text{cm}^2$$

The rectangle with the largest area is shape **B**.

It has a larger area by **2** cm^2 .

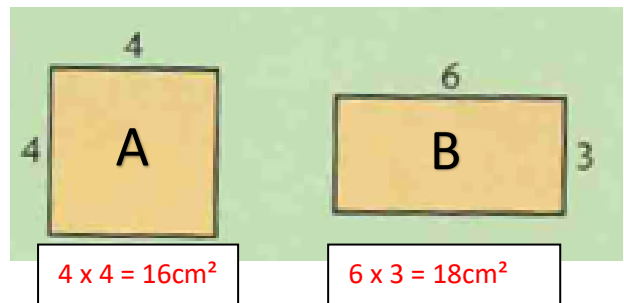


$$5 \times 4 = 20\text{cm}^2$$

$$7 \times 3 = 21\text{cm}^2$$

The rectangle with the largest area is shape **B**.

It has a larger area by **1** cm^2 .

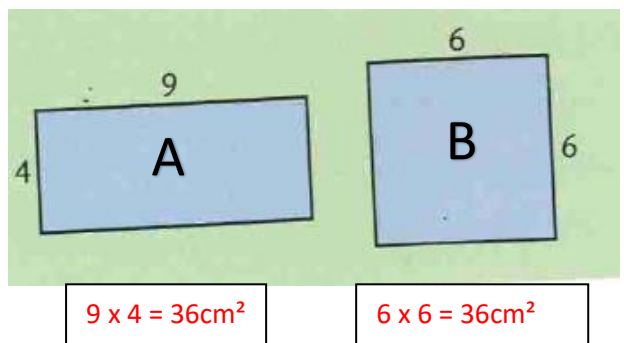


$$4 \times 4 = 16\text{cm}^2$$

$$6 \times 3 = 18\text{cm}^2$$

The rectangle with the largest area is shape **B**.

It has a larger area by **2** cm^2 .



$$9 \times 4 = 36\text{cm}^2$$

$$6 \times 6 = 36\text{cm}^2$$

The rectangle with the largest area is shape **A and B**.

It has a larger area by **0** cm^2 .

Both shapes have the same area.

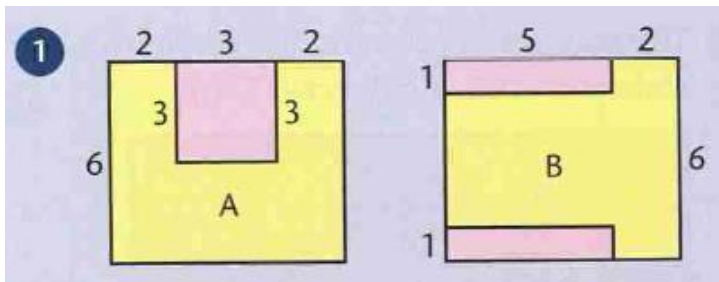
20/01/21

Maths Tasks – White Challenge

Each of the following pairs of diagrams shows two possible ways a shop might use its available floor space for display (yellow) and storage (pink).

For each diagram, calculate the area of floor space for display (yellow) and subtract the area of floor space for storage (pink). Then work out which plan provides the larger display area and by how much.

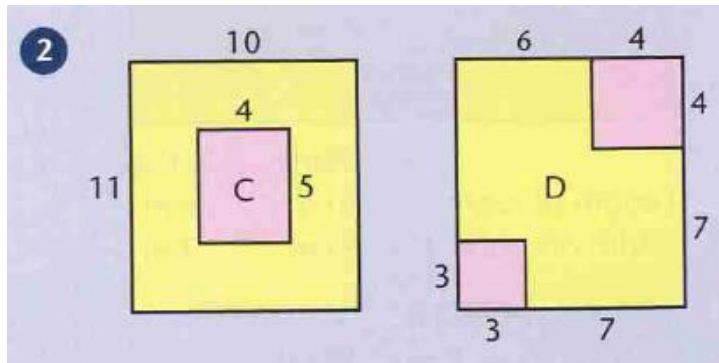
All measurements are in metres. The first one has been done for you.



Shape A:
Display = $7\text{m} \times 6\text{m} = 42\text{m}^2$
Storage = $3\text{m} \times 3\text{m} = 9\text{m}^2$
 Available display area =
 $42\text{m}^2 - 9\text{m}^2 = 33\text{m}^2$

Shape B:
Display = $7\text{m} \times 6\text{m} = 42\text{m}^2$
Storage = $1\text{m} \times 5\text{m} = 5\text{m}^2$
 $5\text{m}^2 + 5\text{m}^2 = 10\text{m}^2$
 Available display area =
 $42\text{m}^2 - 10\text{m}^2 = 32\text{m}^2$

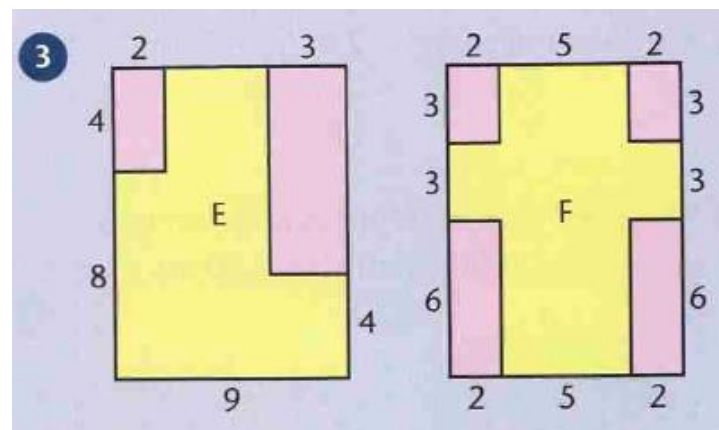
Shape A provides the larger display area by 1m as
 $33\text{m}^2 - 32\text{m}^2 = 1\text{m}^2$.



Shape C:
Display = $10\text{m} \times 11\text{m} = 110\text{m}^2$
Storage = $5\text{m} \times 4\text{m} = 20\text{m}^2$
 Available display area =
 $110\text{m}^2 - 20\text{m}^2 = 90\text{m}^2$

Shape D:
Display = $10\text{m} \times 11\text{m} = 110\text{m}^2$
Storage = $4\text{m} \times 4\text{m} = 16\text{m}^2$
Storage = $3\text{m} \times 3\text{m} = 9\text{m}^2$
 $16\text{m}^2 + 9\text{m}^2 = 25\text{m}^2$
 Available display area =
 $110\text{m}^2 - 25\text{m}^2 = 85\text{m}^2$

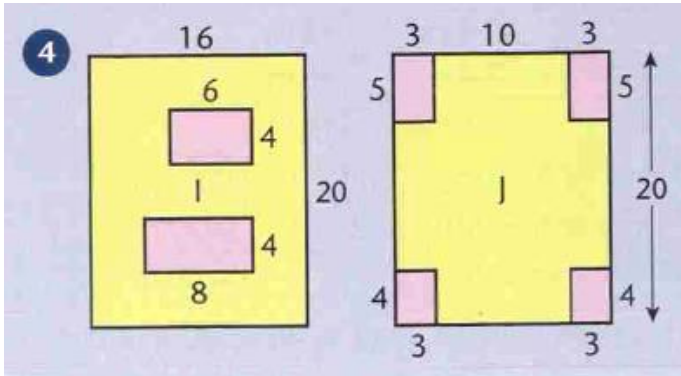
Shape C provides the larger display area by 5m as
 $90\text{m}^2 - 85\text{m}^2 = 5\text{m}^2$.



Shape E:
Display = $12\text{m} \times 9\text{m} = 108\text{m}^2$
Storage = $3\text{m} \times 8\text{m} = 24\text{m}^2$
Storage = $4\text{m} \times 2\text{m} = 8\text{m}^2$
 $24\text{m}^2 + 8\text{m}^2 = 32\text{m}^2$
 Available display area =
 $108\text{m}^2 - 32\text{m}^2 = 76\text{m}^2$

Shape F:
Display = $12\text{m} \times 9\text{m} = 108\text{m}^2$
Storage = $6\text{m} \times 2\text{m} = 12\text{m}^2$
Storage = $3\text{m} \times 2\text{m} = 6\text{m}^2$
 $12\text{m}^2 + 12\text{m}^2 + 6\text{m}^2 + 6\text{m}^2 = 36\text{m}^2$
 Available display area =
 $108\text{m}^2 - 36\text{m}^2 = 72\text{m}^2$

Shape E provides the larger display area by 4m as
 $76\text{m}^2 - 72\text{m}^2 = 4\text{m}^2$.



Shape I:

Display = $16\text{m} \times 20\text{m} = 320\text{m}^2$

Storage = $6\text{m} \times 4\text{m} = 24\text{m}^2$

Storage = $8\text{m} \times 4\text{m} = 32\text{m}^2$

$32\text{m}^2 + 24\text{m}^2 = 56\text{m}^2$

Available display area =

$320\text{m}^2 - 56\text{m}^2 = 264\text{m}^2$

Shape J:

Display = $16\text{m} \times 20\text{m} = 320\text{m}^2$

Storage = $5\text{m} \times 3\text{m} = 15\text{m}^2$

Storage = $4\text{m} \times 3\text{m} = 12\text{m}^2$

$15\text{m}^2 + 15\text{m}^2 + 12\text{m}^2 + 12\text{m}^2$

$= 54\text{m}^2$

Available display area =

$320\text{m}^2 - 54\text{m}^2 = 266\text{m}^2$

Shape J provides the larger display area by 2m as
 $266\text{m}^2 - 264\text{m}^2 = 2\text{m}^2$.