

Year 6 Perimeter, area and volume

Can you compare shapes?



Coventry Building Society Arena

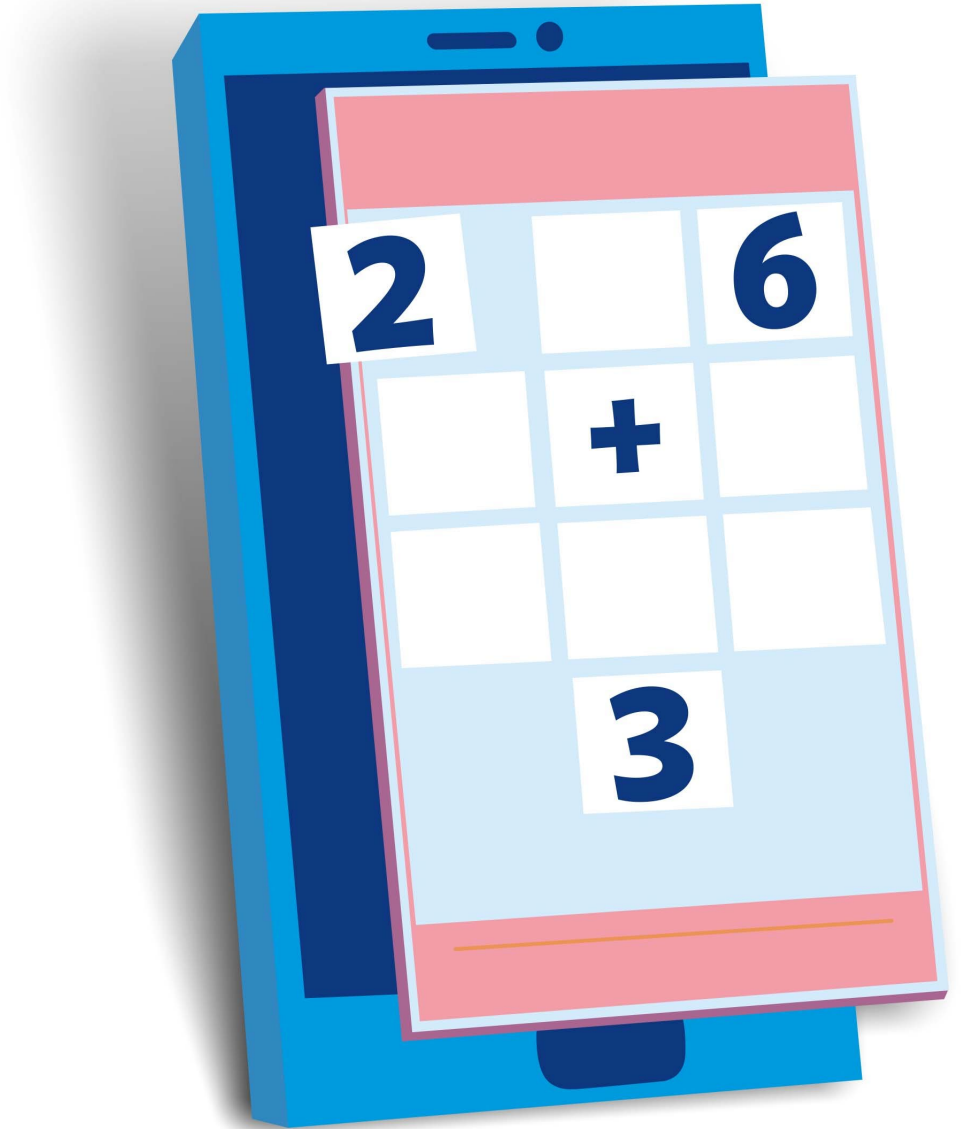
- The Arena has 32,609 seats.
- Wasps Rugby Football Club (Wasps RFC) and Coventry City Football Club (CCFC) play games at the Arena.
- Music events are held there.
- The complex includes a 6,000 square metre exhibition hall.
- There's also a hotel and casino.



The quiz

You are to take part in a quiz where there are 8 questions. For each question you'll be shown two shapes. Your task is to guess which shapes have either the same or largest perimeter, area or volume. Once you have made your guess either calculate the perimeter, area or volume. The shapes will be rooms or facilities you would expect to see in an arena complex like Coventry Building Society Arena.

Can you guess them all right?



Which of the 2 hotel rooms looks like they have the same perimeter?

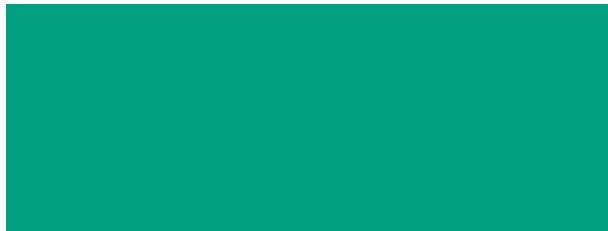
Standard room



Deluxe room



Luxurious room



Superior room



Which of the 2 hotel rooms looks like they have the same area?

Standard room



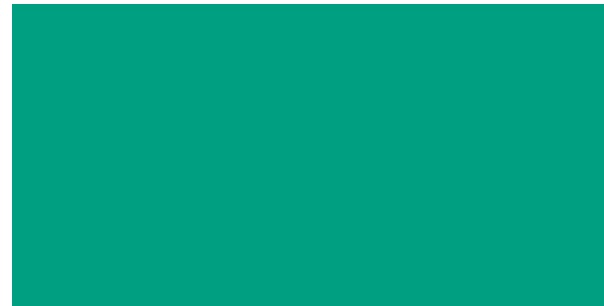
Deluxe room



Luxurious room



Superior room



Calculate the perimeter of all 4 hotel rooms

Standard room



Deluxe room



Luxurious room



Superior room



Calculate the perimeter of all 4 hotel rooms

Standard room

20m²



Deluxe room

20m²



Luxurious room

22m²



Superior room

24m²



Calculate the perimeter of all 4 hotel rooms

Standard and Deluxe

Standard room

20m²



3m

7m



Deluxe room

20m²



4m

6m



Luxurious room

22m²



3m

8m

Superior room

24m²

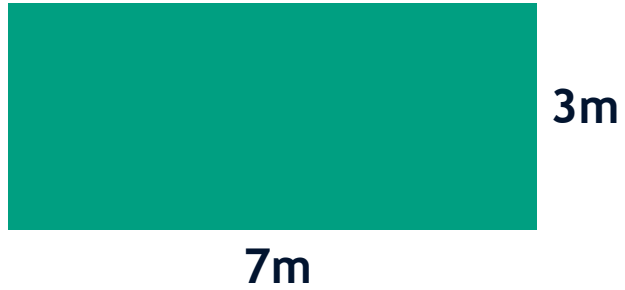


4m

8m

Calculate the area of all 4 hotel rooms

Standard room



Deluxe room



Luxurious room



Superior room



Calculate the area of all 4 hotel rooms

Standard room

21m²



Deluxe room

24m²



Luxurious room

24m²



Superior room

32m²

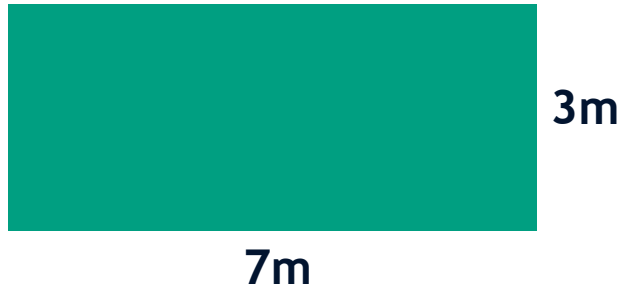


Calculate the area of all 4 hotel rooms

Deluxe and Luxurious

Standard room

21m²



Deluxe room

24m²



Luxurious room

24m²



Superior room

32m²



Guess which car park has the largest area

East car park



West car park

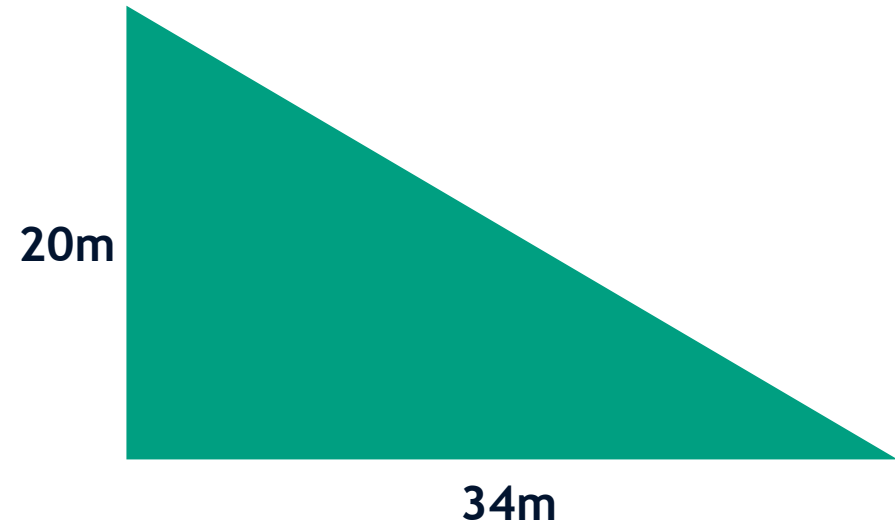


Calculate which car park has the largest area

East car park



West car park



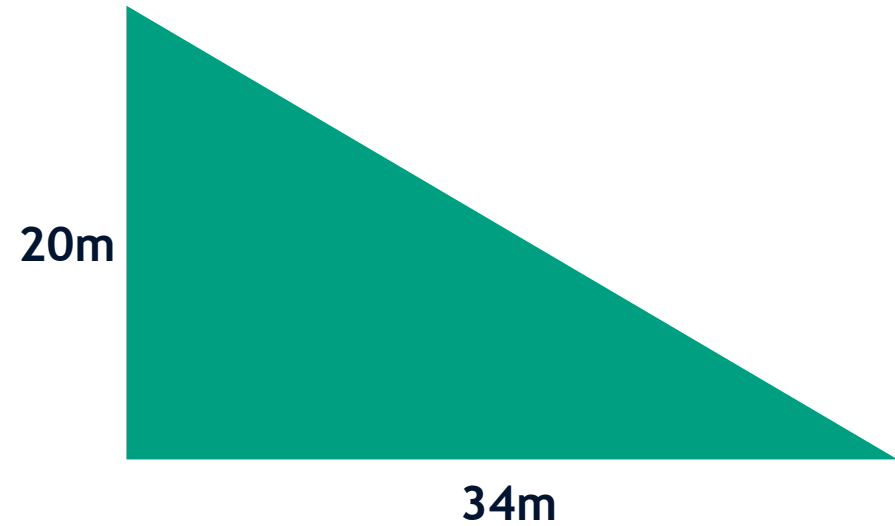
Calculate which car park has the largest area

East car park



384m^2

West car park



340m^2

Which car park has the largest area?

East car park

East car park



12m



32m

384m^2

West car park



20m

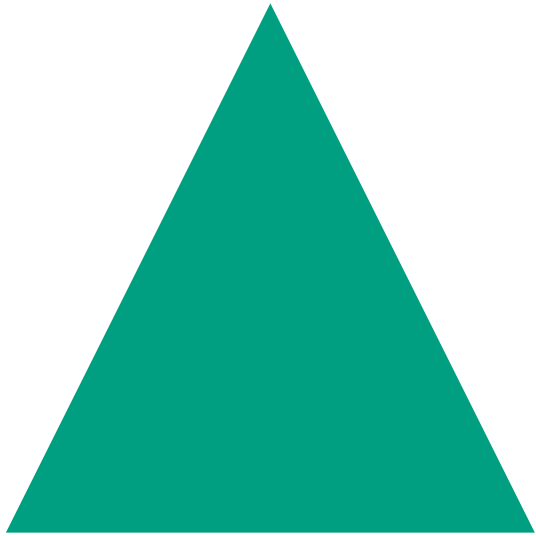


34m

340m^2

Guess which meeting room has the largest area

Frank Whittle room

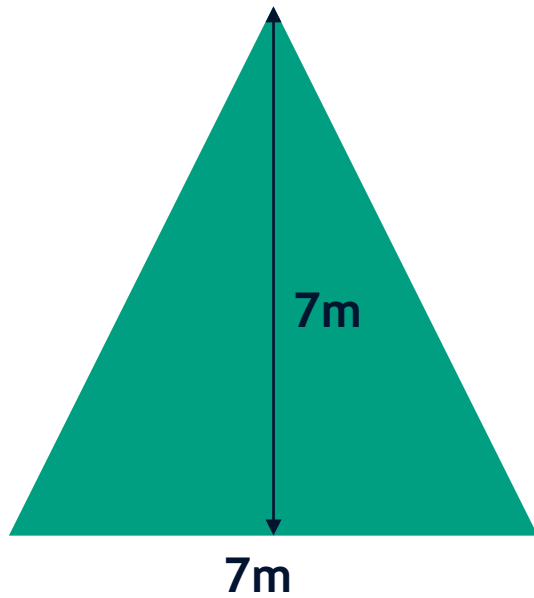


Lady Godiva room

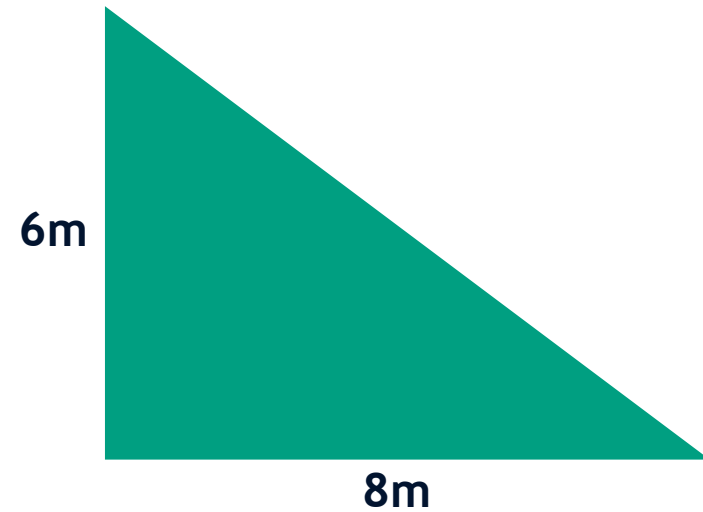


Calculate which meeting room has the largest area

Frank Whittle room

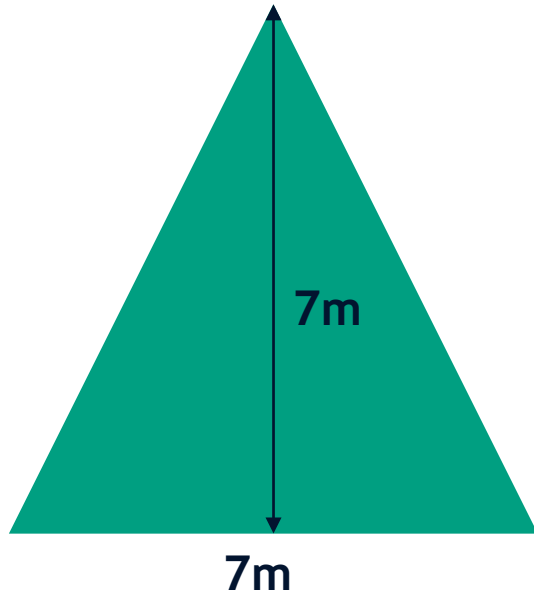


Lady Godiva room



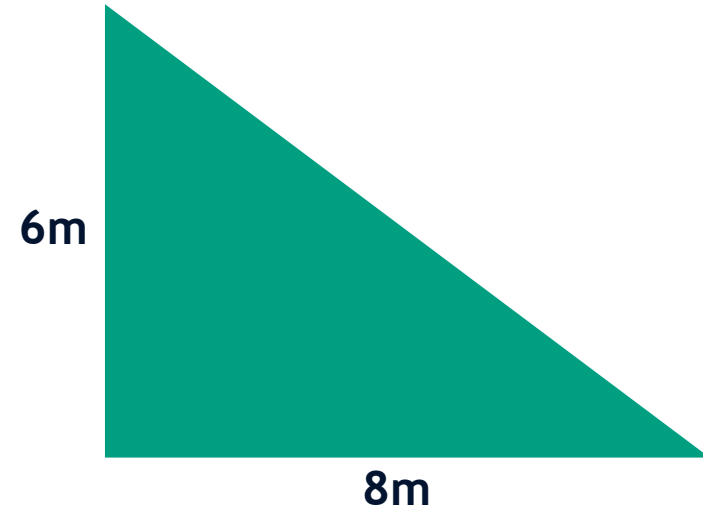
Calculate which meeting room has the largest area

Frank Whittle room



24.5m^2

Lady Godiva room

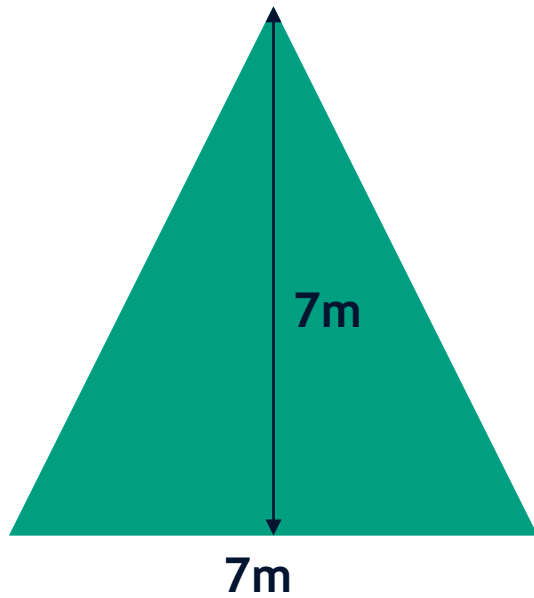


24m^2

Which meeting room has the largest area?

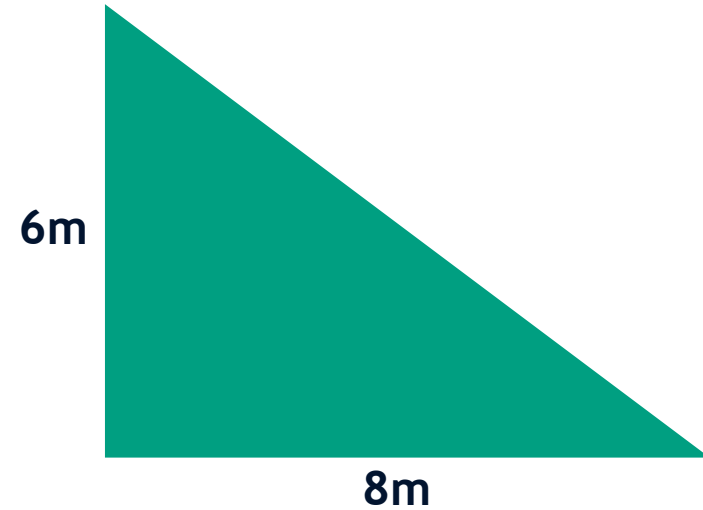
Frank Whittle room

Frank Whittle room



24.5m²

Lady Godiva room



24m

Guess which restaurant has the largest area

Sunshine cafe

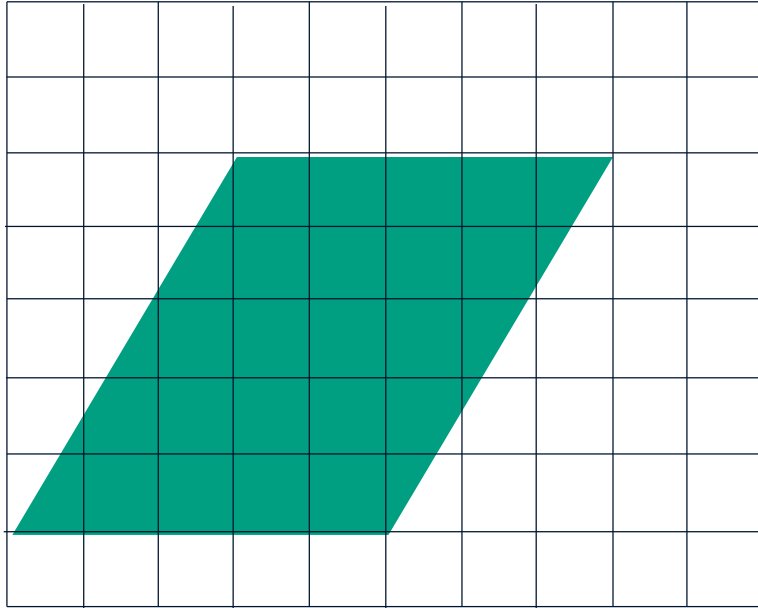


Moonlight restaurant

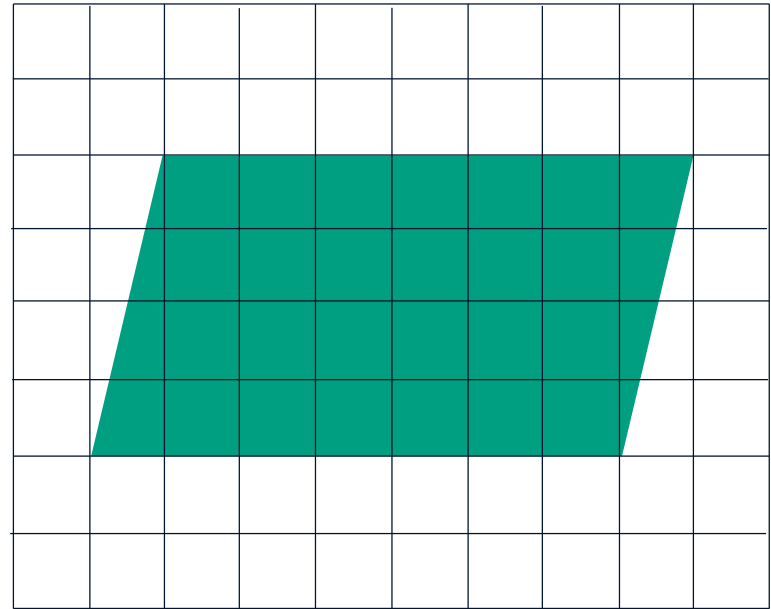


Calculate which restaurant has the largest area

Sunshine cafe
(grid made with 1m squares)



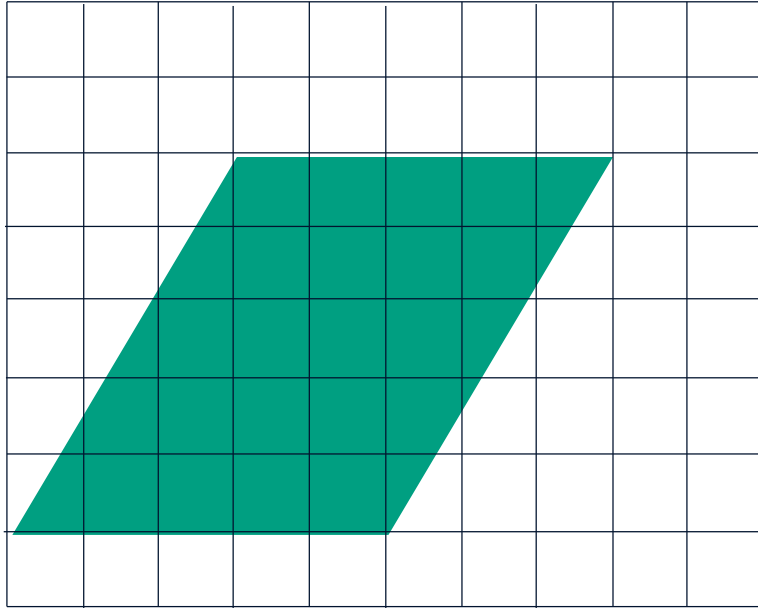
Moonlight restaurant
(grid made with 1m squares)



Calculate which restaurant has the largest area

Sunshine cafe

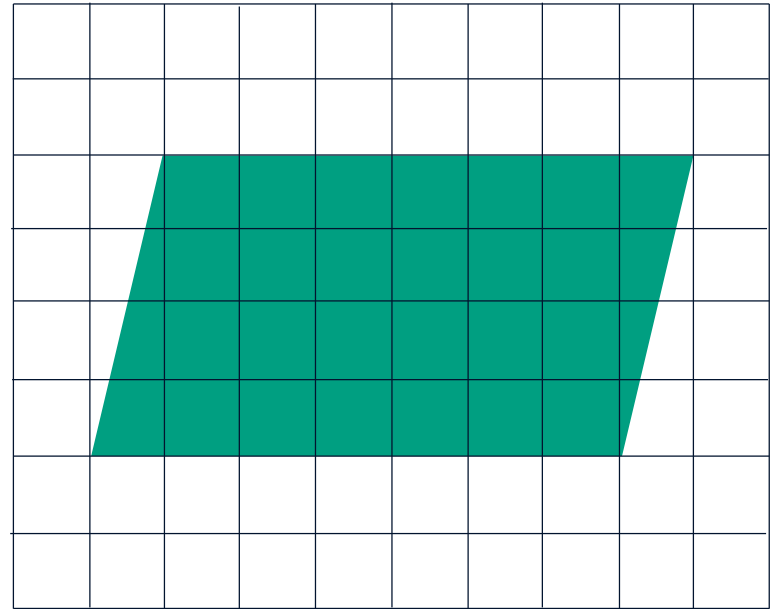
(grid made with 1m squares)



25m^2

Moonlight restaurant

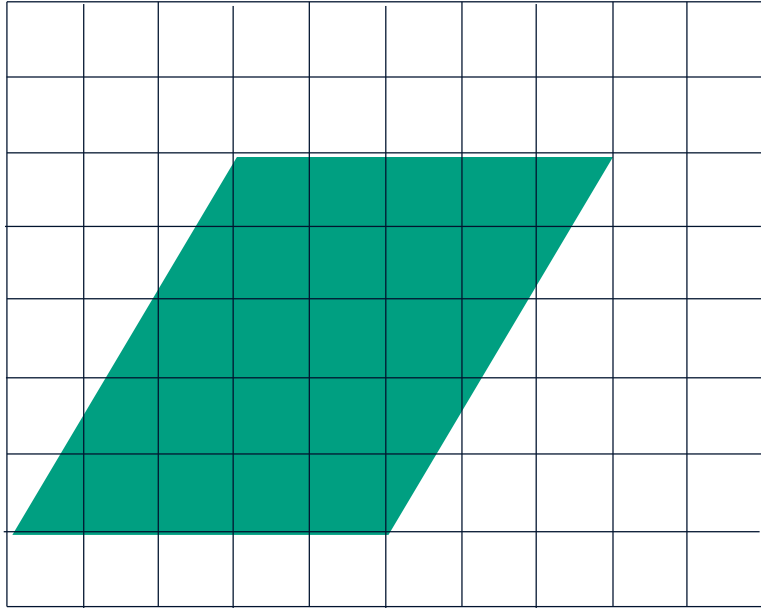
(grid made with 1m squares)



28m^2

Which restaurant has the largest area?

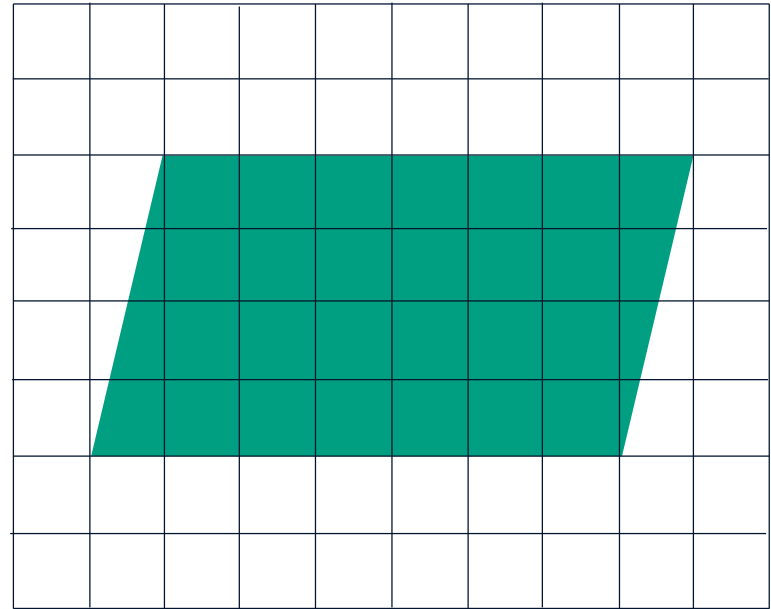
Sunshine cafe
(grid made with 1m squares)



25m²

Moonlight restaurant

Moonlight restaurant
(grid made with 1m squares)



28m²

Guess which building has the largest volume

Home team dressing room

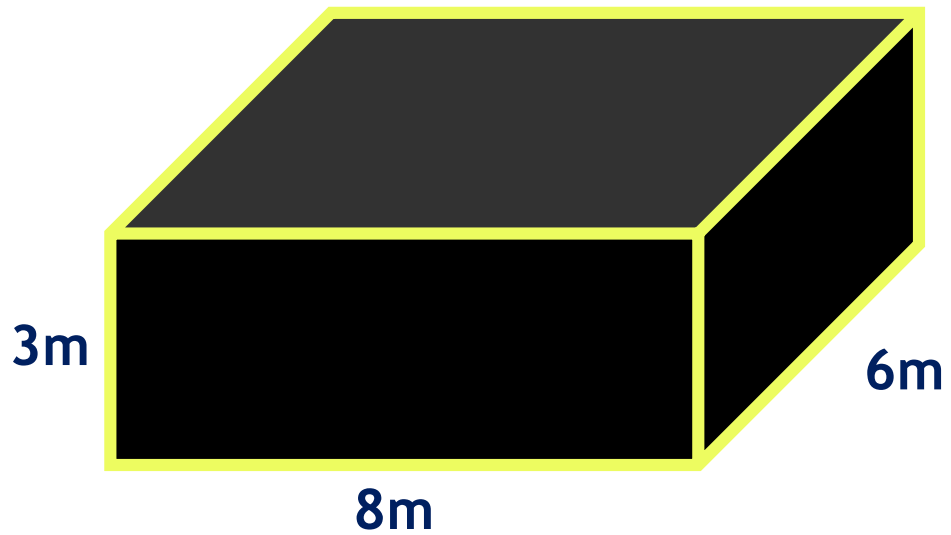


Away team dressing room



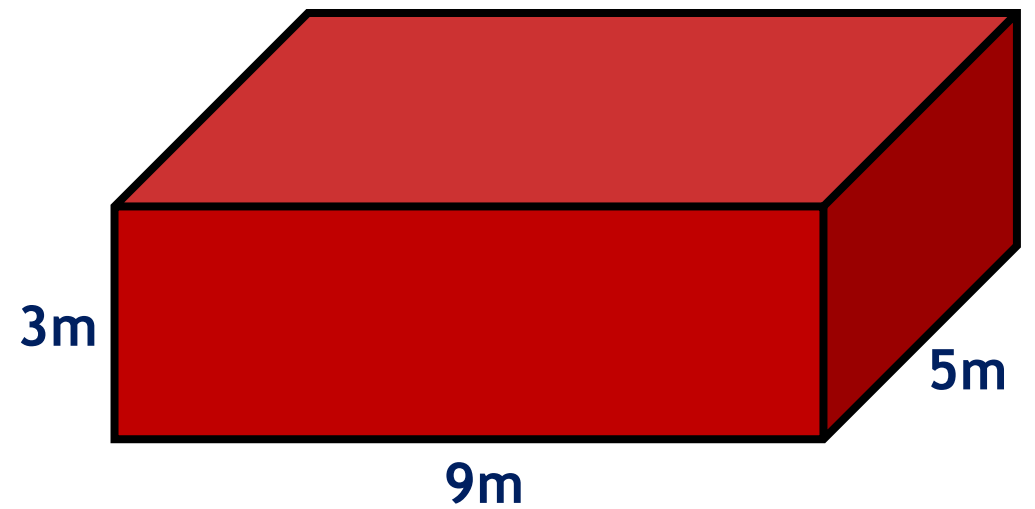
Calculate which building has the largest volume

Home team dressing room



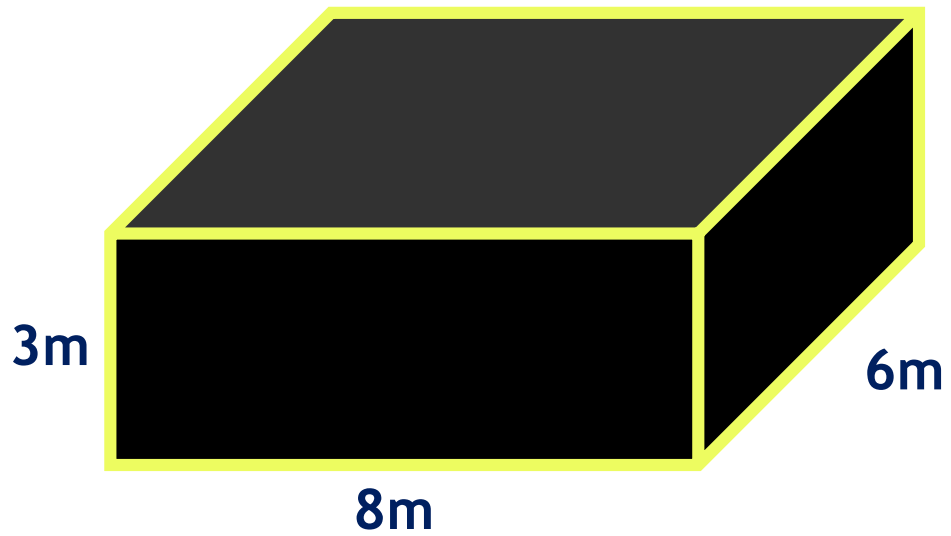
144m^3

Away team dressing room



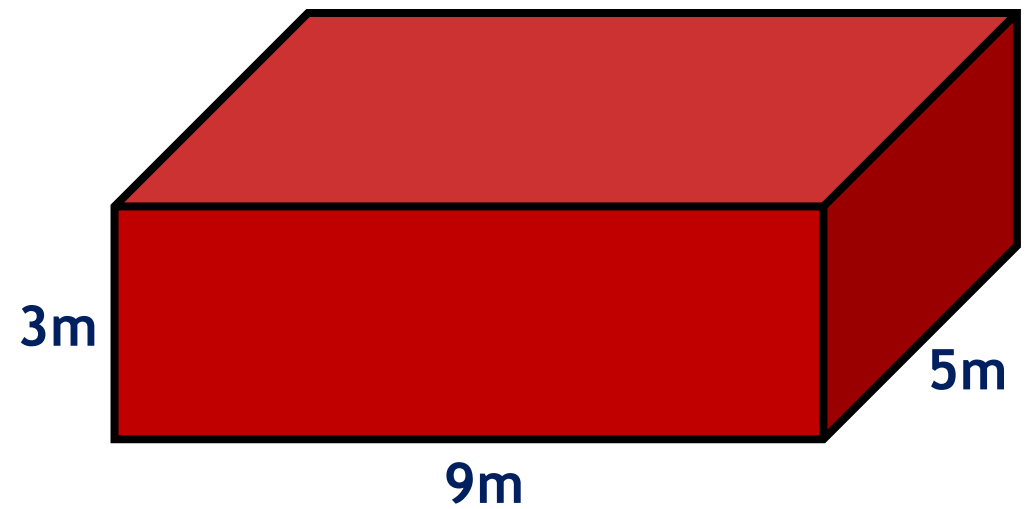
Calculate which building has the largest volume

Home team dressing room



144m^3

Away team dressing room

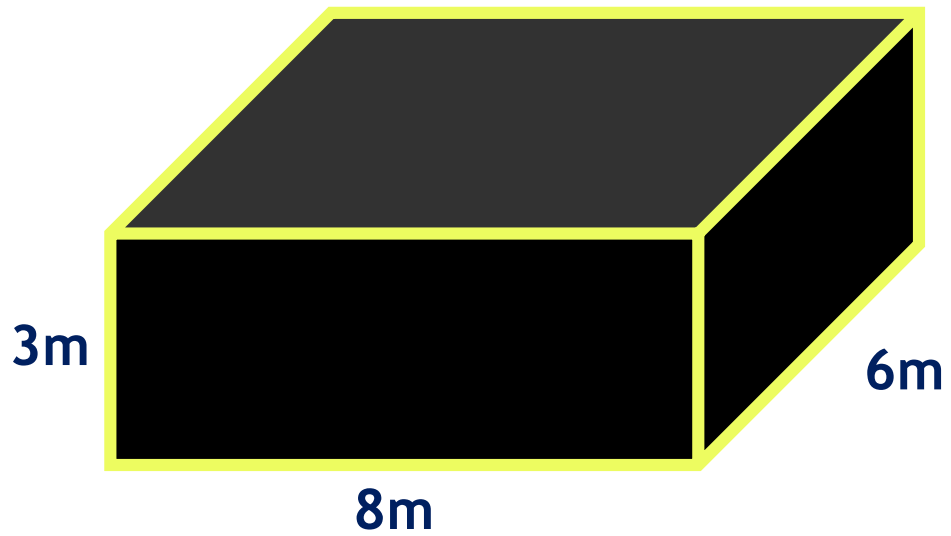


135m^3

Which building has the largest volume?

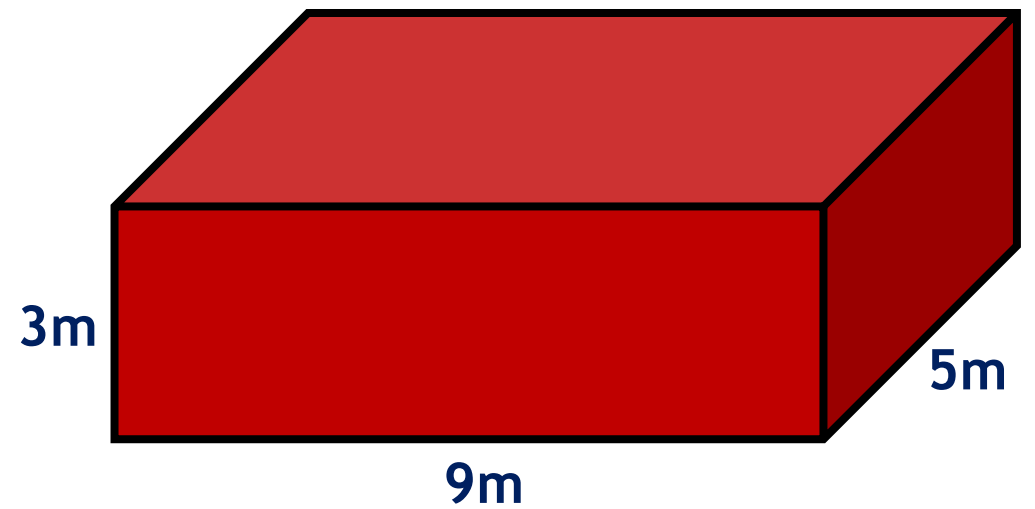
Home team dressing room

Home team dressing room



144m^3

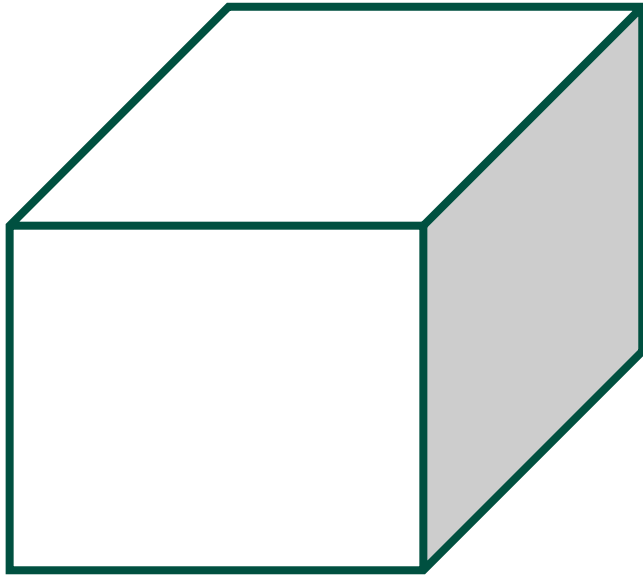
Away team dressing room



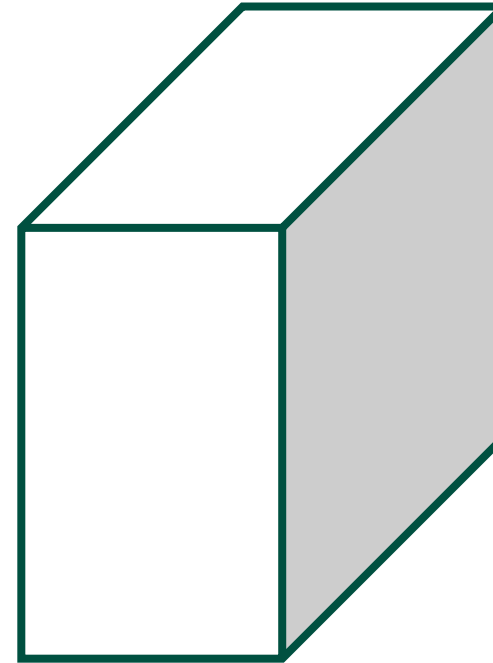
135m^3

Guess which stationery item has the largest volume

Box of business cards

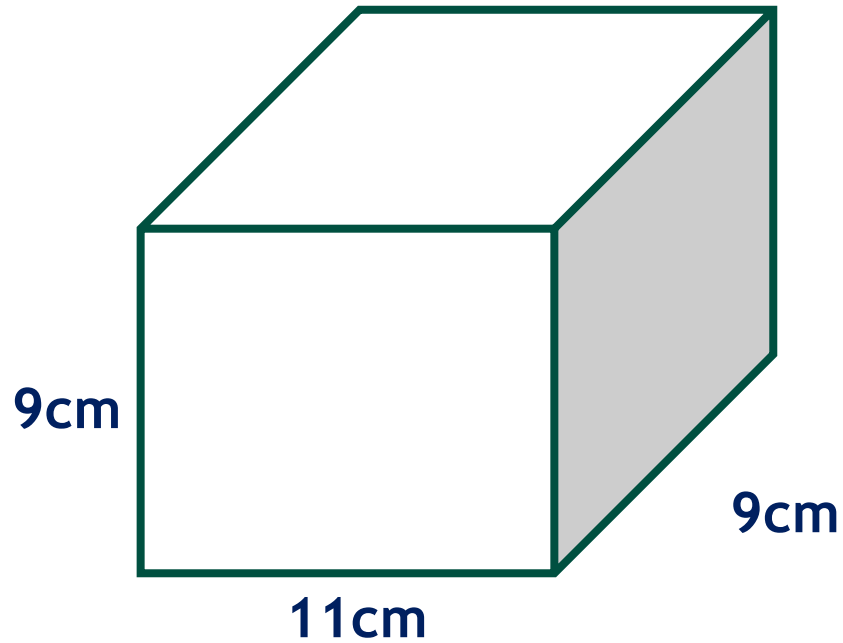


Box of whiteboard pens

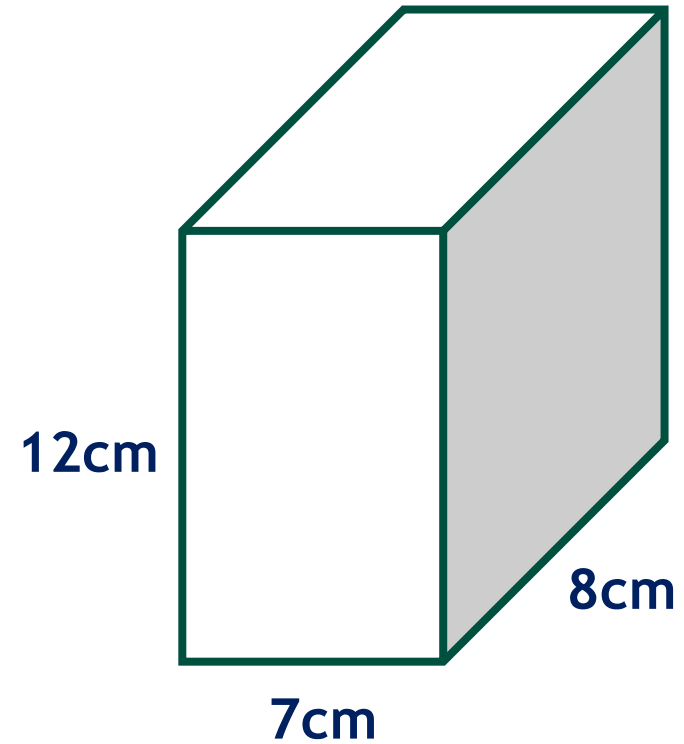


Calculate which stationery item has the largest volume

Box of business cards

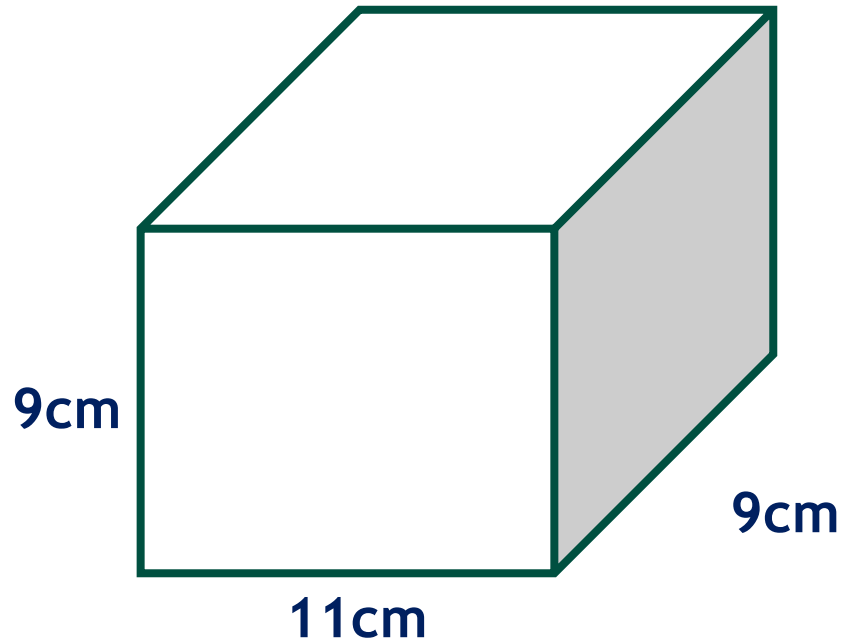


Box of whiteboard pens



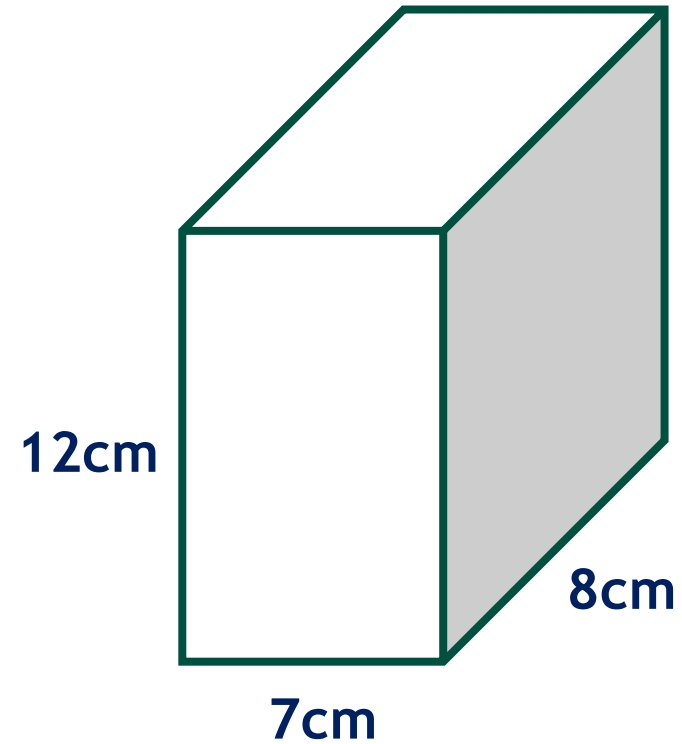
Calculate which stationery item has the largest volume

Box of business cards



891cm^3

Box of whiteboard pens

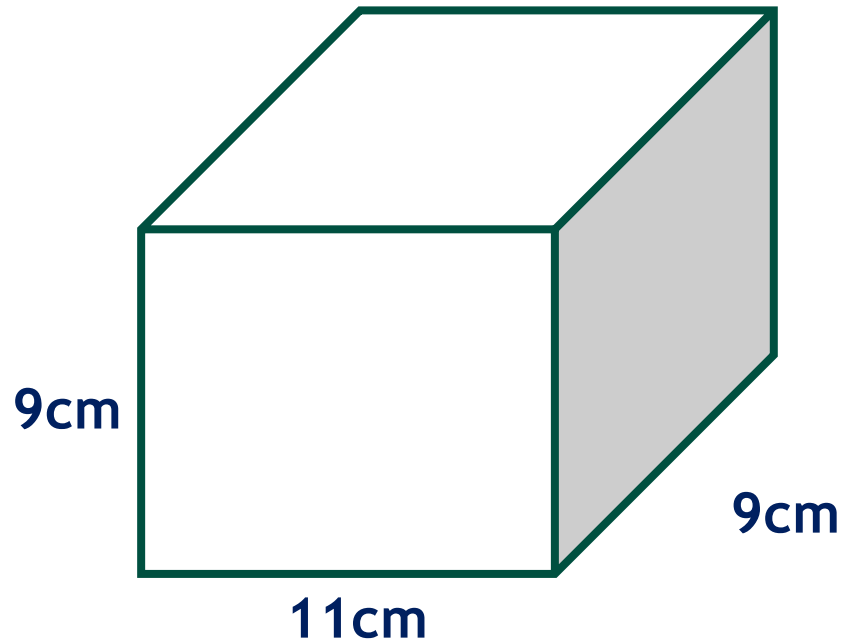


672cm^3

Which stationery item has the largest volume?

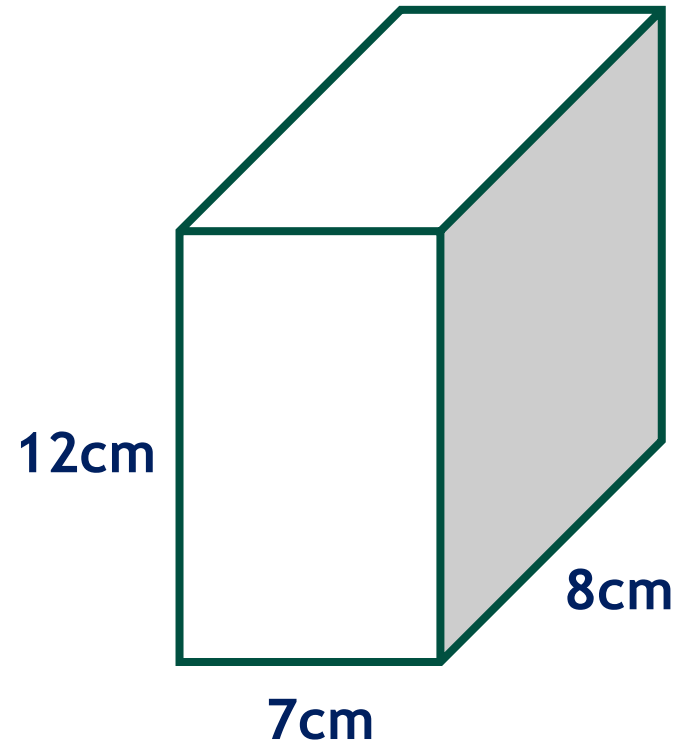
Box of business cards

Box of business cards



891cm^3

Box of whiteboard pens



672cm^3

Guess which hot tub has the largest volume

Warwickshire spa

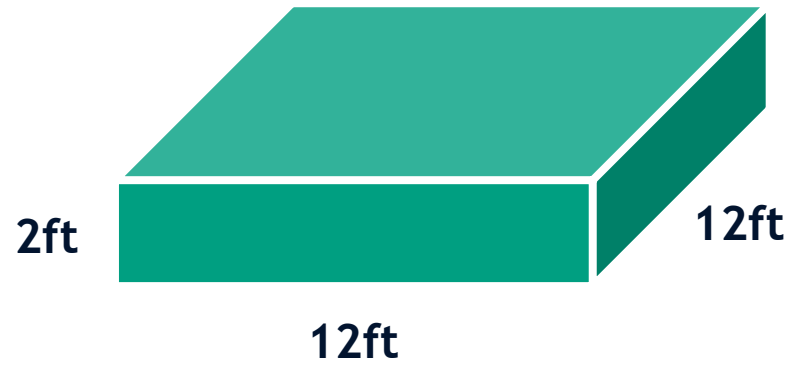


Coventry spa

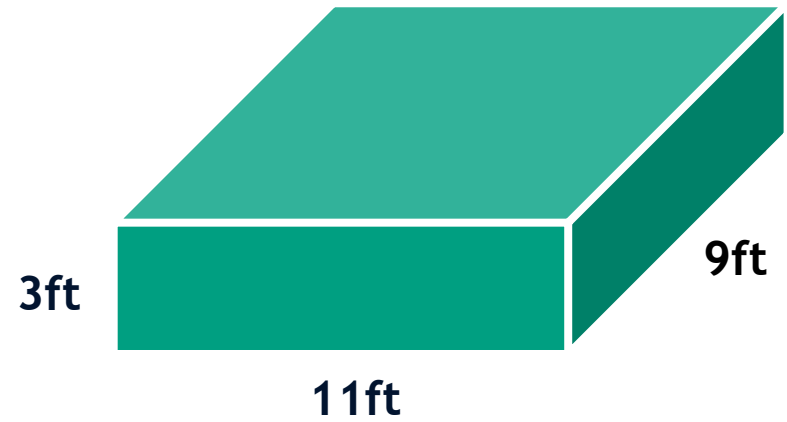


Calculate which hot tub has the largest volume

Warwickshire spa

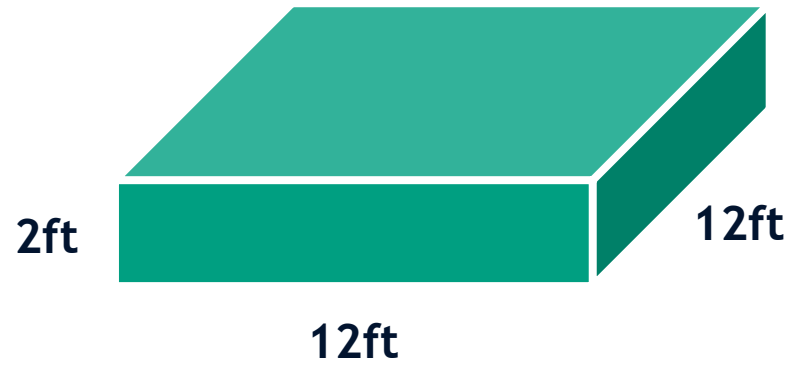


Coventry spa



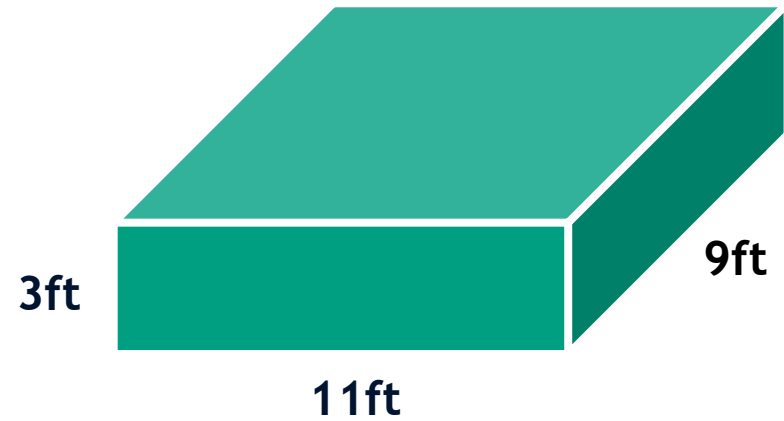
Calculate which hot tub has the largest volume

Warwickshire spa



288ft^3

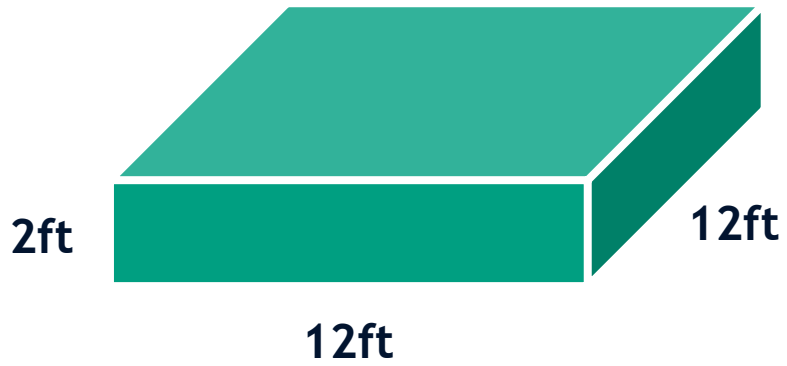
Coventry spa



297ft^3

Which hot tub has the largest volume?

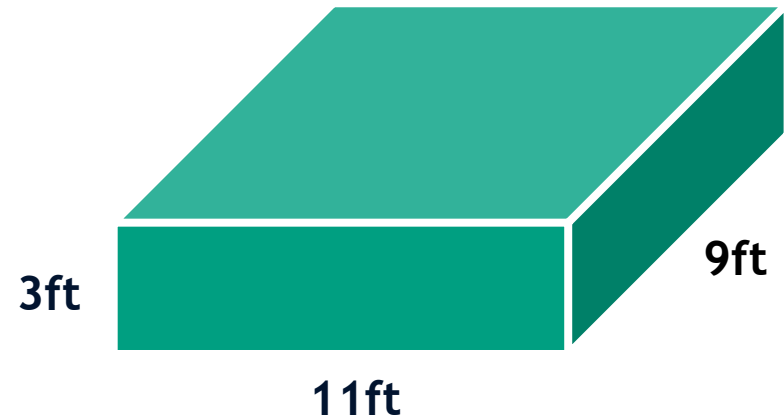
Warwickshire spa



288ft^3

Coventry spa

Coventry spa



297ft^3

Did you guess
them all right?

