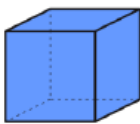


## Recognise and Describe 3D Shapes

## Recognise and Describe 3D Shapes

1a. Are the following statements always true, sometimes true or never true?

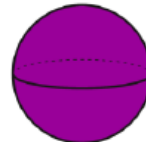
- A) A cube has 8 faces.  
B) A square based pyramid has 4 triangular faces.



PS

1b. Are the following statements always true, sometimes true or never true?

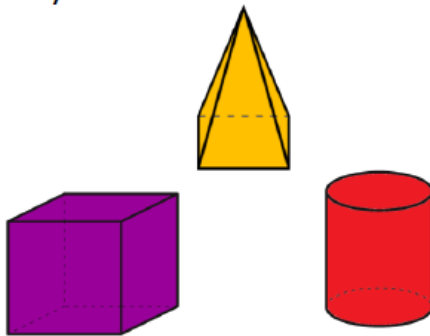
- A) A cone has one circular face.  
B) A sphere has no vertices.



PS

2a. Which shape is the odd one out? Think about edges, vertices and faces.

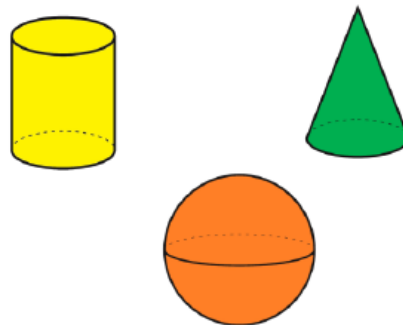
Explain your answer.



R

2b. Which shape is the odd one out? Think about edges, vertices and faces.

Explain your answer.



R

3a. Use the cards below to make as many correct statements as you can.

1. The number of edges on a cube.
2. The number of faces on a cuboid.
3. The number of vertices on a cylinder.



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PS

3b. Use the cards below to make as many correct statements as you can.

1. The number of edges on a square based pyramid.
2. The number of triangular faces on a square based pyramid.
3. The number of curved edges on a cone.



>

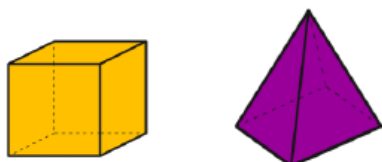
PS

## Recognise and Describe 3D Shapes

## Recognise and Describe 3D Shapes

4a. Are the following statements always true, sometimes true or never true?

- A) A cube has an equal amount of faces to a cuboid.  
B) A square based pyramid has 4 triangular faces.



PS

4b. Are the following statements always true, sometimes true or never true?

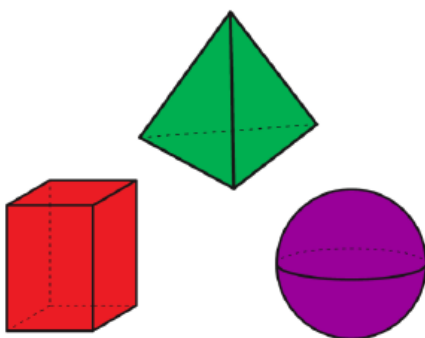
- A) A cylinder has one circular face.  
B) A cylinder has 1 vertex.



PS

5a. Which shape is the odd one out? Think about edges, vertices and faces.

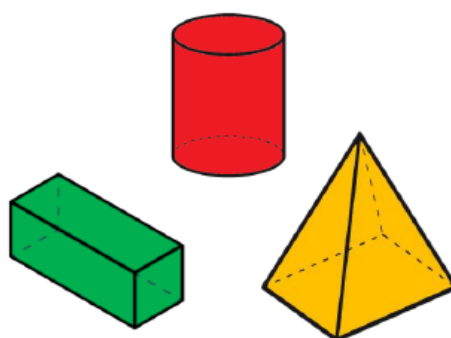
Explain your answer.



R

5b. Which shape is the odd one out? Think about edges, vertices and faces.

Explain your answer.



R

6a. Use the cards below to make as many correct statements as you can.

1. The number of faces on a cube.
2. The number of vertices on a cuboid.
3. The number of curved edges on a cylinder.
4. The number of vertices on a triangular prism.



>

PS

6b. Use the cards below to make as many correct statements as you can.

1. The number of faces on a square based pyramid.
2. The number of vertices on a sphere.
3. The number of edges on a triangular prism.
4. The number of vertices on a cone.



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PS

## Recognise and Describe 3D Shapes

## Recognise and Describe 3D Shapes

7a. Are the following statements always true, sometimes true or never true?

- A) A cuboid has more square faces than a square based pyramid.
- B) A pyramid has the same amount of vertices as faces.
- C) A pentagonal prism has one more pentagonal face than a pentagonal based pyramid.



PS

7b. Are the following statements always true, sometimes true or never true?

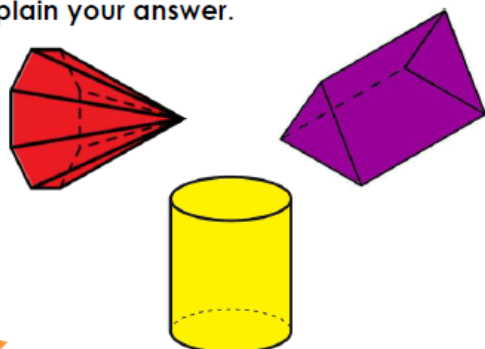
- A) An octagonal prism has 8 equal rectangular faces.
- B) Shapes with a curved surface have a circular face.
- C) A hexagonal prism has more edges than faces.



PS

8a. Which shapes could be the odd one out? Think about edges, vertices and faces.

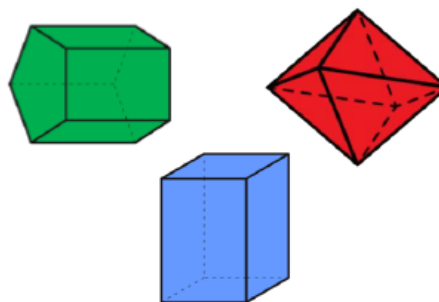
Explain your answer.



R

8b. Which shapes could be the odd one out? Think about edges, vertices and faces.

Explain your answer.



R

9a. Use the cards below to make as many correct statements as you can.

1. The number of vertices in three square based pyramids.
2. The number of edges in a pentagonal prism.
3. The number of vertices in a cuboid.
4. The number of rectangular faces in an octagonal prism.



>

PS

9b. Use the cards below to make as many correct statements as you can.

1. The number of edges in two triangular based pyramids.
2. The number of vertices in a hexagonal prism.
3. The number of vertices in a cone.
4. The number of edges in a cuboid.



<

PS

**Reasoning and Problem Solving**  
**Recognise and Describe 3D Shapes**

**Developing**

1a. A. Never true; B. Always true

2a. Various possible answers, for example:  
The cylinder is the odd one out as it the only one with a curved surface. Accept any answer which accurately explains which shape is the odd one out.

3a.  $3 < 2$ ;  $3 < 1$ ;  $2 < 1$

**Expected**

4a. A. Always true; B. Always true

5a. Various possible answers, for example:  
The triangular based pyramid is the odd one out as it the only one with triangular shaped faces. Accept any answer which accurately explains which shape is the odd one out.

6a.  $2 > 1$ ;  $2 > 3$ ;  $2 > 4$ ;  $1 > 3$ ;  $4 > 3$

**Greater Depth**

7a. A. Sometimes true; B. Always true;  
C. Always true

8a. Various possible answers, for example:  
The octagonal pyramid is the odd one out as it the only one with 9 faces. Accept any answer which accurately explains which shape is the odd one out.

9a.  $1 > 3$ ;  $1 > 4$ ;  $2 > 3$ ;  $2 > 4$

**Reasoning and Problem Solving**  
**Recognise and Describe 3D Shapes**

**Developing**

1b. A. Always true; B. Always true

2b. Various possible answers, for example:  
The cylinder is the odd one out as it the only one with 2 faces. Accept any answer which accurately explains which shape is the odd one out.

3b.  $1 > 2$ ;  $1 > 3$ ;  $2 > 3$

**Expected**

4b. A. Never true; B. Never true

5b. Various possible answers, for example:  
The cylinder is the odd one out as it the only one with no vertices. Accept any answer which accurately explains which shape is the odd one out.

6b.  $4 < 1$ ;  $4 < 3$ ;  $1 < 3$ ;  $2 < 1$ ;  $2 < 3$

**Greater Depth**

7b. A. Always true; B. Sometimes true;  
C. Always true

8b. Various possible answers, for example:  
The pentagonal prism is the odd one out as it is the only one with an odd number of faces. Accept any answer which accurately explains which shape is the odd one out.

9b.  $3 < 1$ ;  $3 < 2$ ;  $3 < 4$ ;  $2 = 1$ ;  $4 = 1$