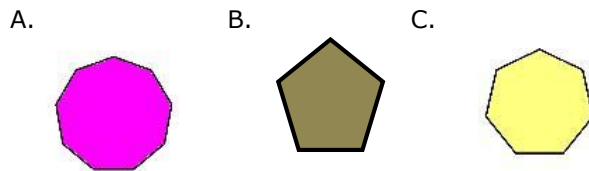


# Year 7 Space & Geometry Worksheet

1. Which of these is a pentagon?



2. What figure is this?

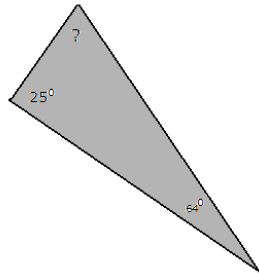
- A. octagon
- B. rectangular pyramid
- C. heptagon
- D. decagon



3. Estimate the measure of this angle within  $10^\circ$ .



4. What is the measure of the missing angle?



5. Estimate the measure of this angle within  $10^\circ$ .



6. Estimate the measure of this angle within  $10^\circ$ .



7. Two angles of a quadrilateral measure  $140^\circ$  and  $120^\circ$ . The other two angles are in a ratio of 2:3. What are the measures of those two angles?

\_\_\_ $^\circ$ , \_\_\_ $^\circ$

## Year 7 Space & Geometry Worksheet



8. The property of which shape is this:  
It is perfectly symmetrical. It has no edges or vertices. It is not a polyhedron. All points on the surface are the same distance from the center.

- A. Cylinder
- B. Sphere
- C. Cone
- D. Torus

9. The property of which shape is this:  
It has a flat base and a flat top. The base is the same as the top, and also in-between. It has one curved side. Because it has a curved surface it is not a polyhedron.

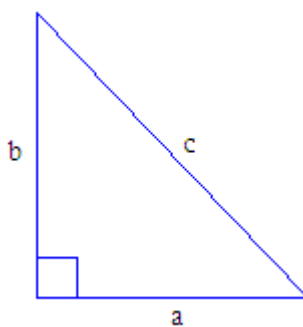
- A. Cylinder
- B. Sphere
- C. Cone
- D. Torus

10. The property of which shape is this:  
It has a flat base. It has one curved side. Because it has a curved surface it is not a polyhedron.

- A. Cylinder
- B. Sphere
- C. Cone
- D. Torus

11. If we take the length of the hypotenuse to be  $c$  and the length of the legs to be  $a$  and  $b$  then the Pythagorean theorem tells us that:

$$c^2 = a^2 + b^2$$



For each of the following, find the length of the unknown side. (Refer to the above triangle)  
Round to the nearest hundredths when necessary.

- |                          |                          |
|--------------------------|--------------------------|
| A. $a = 9, b = 12, c =$  | B. $a = 15, b = 8, c =$  |
| C. $b = 12, c = 13, a =$ | D. $a = 7, c = 25, b =$  |
| E. $a = 40, c = 41, b =$ | F. $a = 21, b = 20, c =$ |