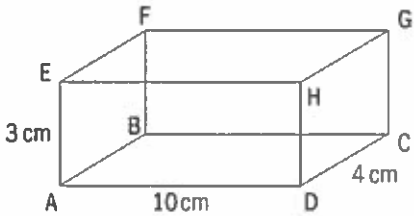
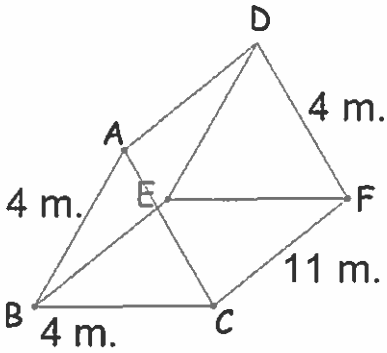
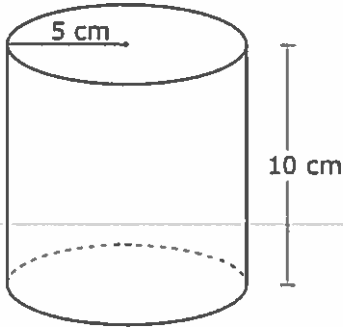
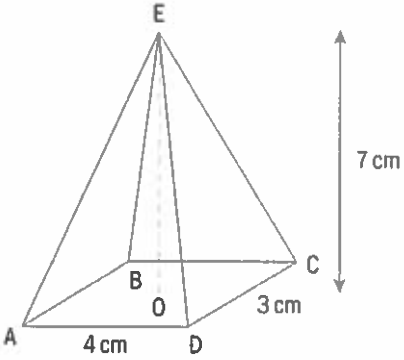
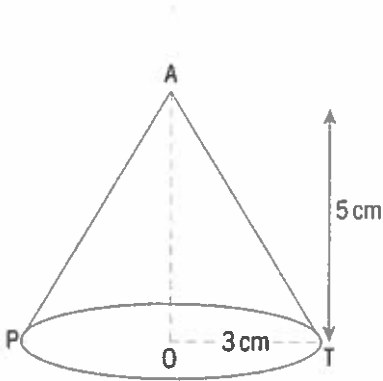
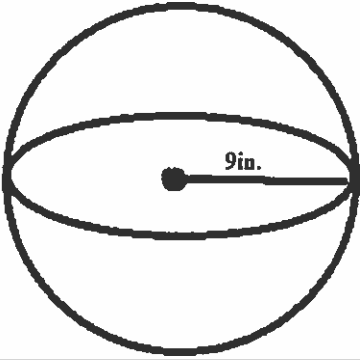


IB Math Studies Year 2

10.5 Volume of 3D Solids

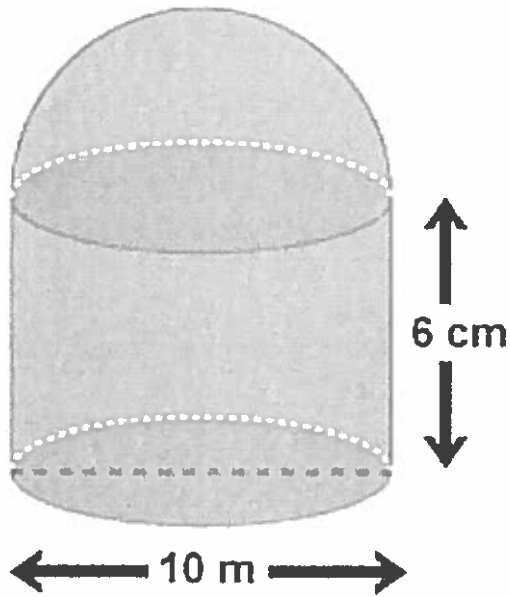


Solid	Prism Volume → Area of the Base x Height $V = Bh$
	
	
	

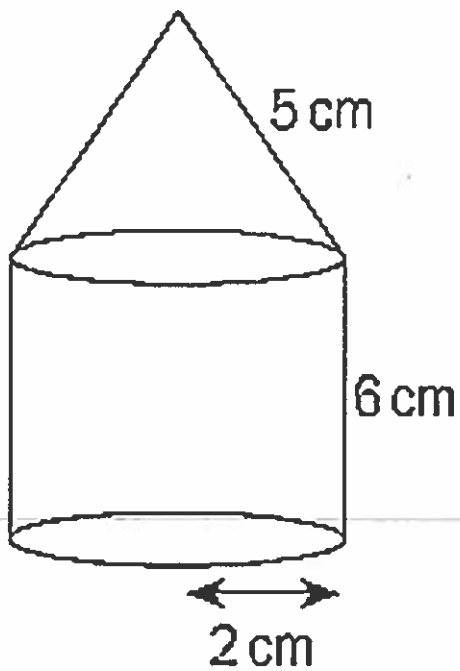
Solid	Use specific formulas for the volumes of other solids
 <p>A square pyramid with apex E and base $ABCD$. The base is a rectangle with side $AD = 4\text{ cm}$ and side $DC = 3\text{ cm}$. The height EO is 7 cm.</p>	
 <p>A cone with apex A and circular base with center O. The radius OT is 3 cm and the height AO is 5 cm.</p>	
 <p>A sphere with radius 9 in.</p>	

Find the volume of each solid

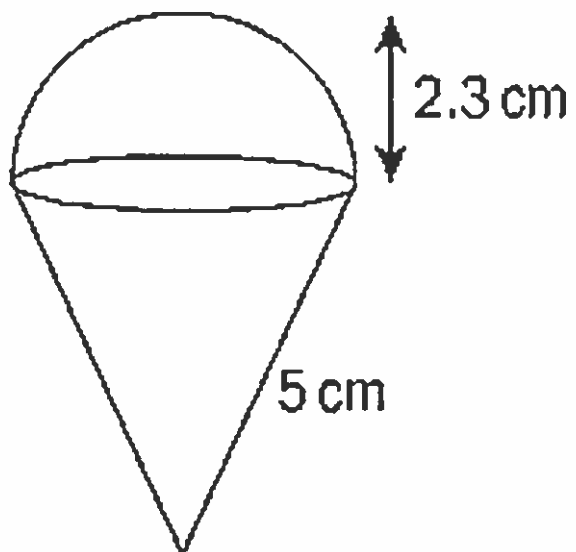
1.



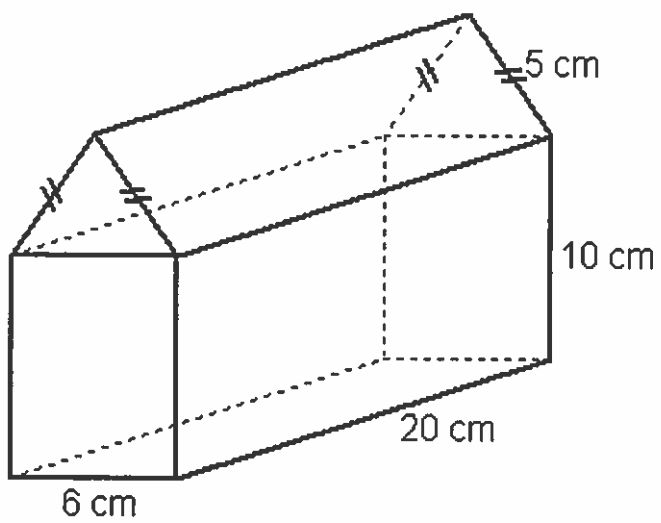
2.



3.



4.



Week 7 **Thursday 3 October**
Chapter Ten: **3D Geometry and Trigonometry**
Topic: **Review for Test**
IB Syllabus: **5.5.1 Geometry of three dimensional shapes**
Lesson Obj: **Students will complete review questions for test**

Review and Intro:

0. **Homework Questions.**
1. **4 Pics 1 Word**
2. **Paper 2 Review in class:**
 - **Nov 2012(Q3)**
 - **May 2012:TZ2(Q4)**

Check for Understanding:

3. **Students complete review problems**
4. **TEST next period**

Assignment: **Students will complete review problems**

Evaluation:

3. [Maximum mark: 19]

A contractor is building a house. He first marks out three points A, B and C on the ground such that $AB = 5\text{ m}$, $AC = 7\text{ m}$ and angle $BAC = 112^\circ$.

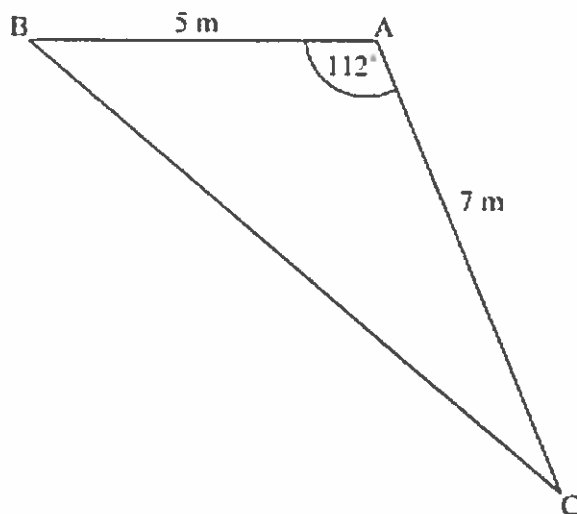


diagram not to scale

(a) Find the length of BC.

[3 marks]

He next marks a fourth point, D, on the ground at a distance of 6 m from B, such that angle BDC is 40° .

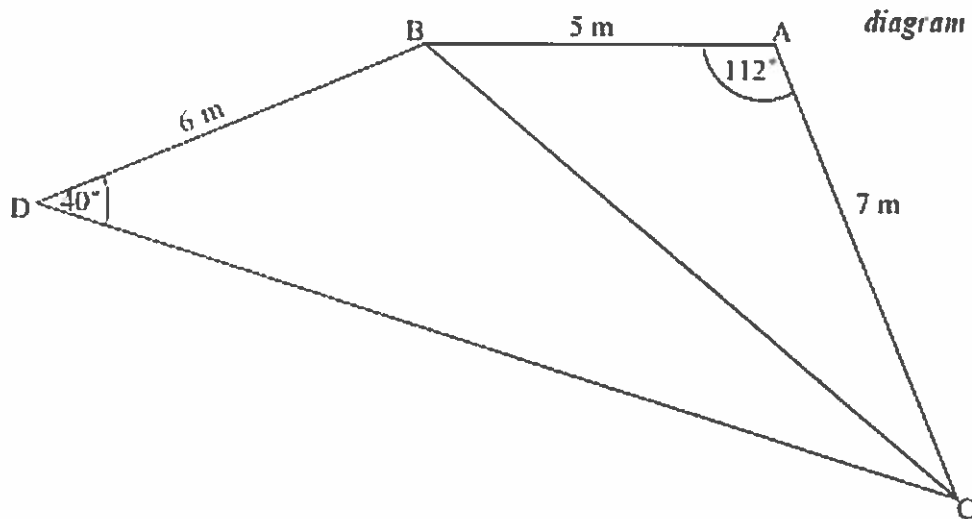


diagram not to scale

(b) Find the size of angle DBC.

[4 marks]

(c) Find the area of the quadrilateral ABDC.

[4 marks]

(This question continues on the following page)