Name	
Form	
Teacher	

Maths Homework Booklet

Year 9 Spring 1

Set P,1,2,3

Topic	Score achieved	Sparx %
1. Names and sketches of 3D shapes	/16	%
2. Edges, faces and vertices	/24	%
3. Volumes	/9	%
4. Angles (basics)	/18	%
5. Angles in parallel lines	/33	%
6. Angles in parallel lines	/23	%

Week 1

Question 1: Draw the following 3D shapes

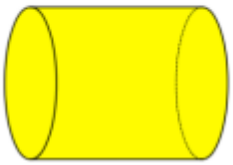
(a) A cube (b) A cuboid (c) A sphere

(d) A cylinder (e) A triangular prism (f) A cone

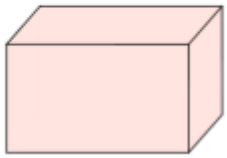
(g) A square-based pyramid (h) A tetrahedron/triangular-based pyramid

Question 2: Name each of the 3D shapes below

(a)

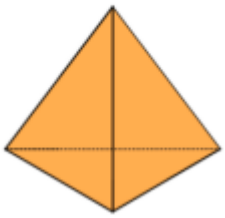


(b)

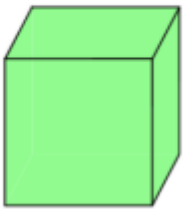


(c)

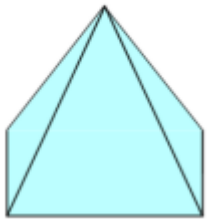
(d)



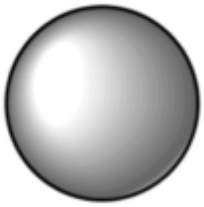
(e)



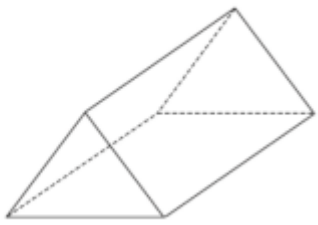
(f)



(g)



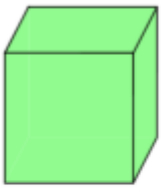
(h)

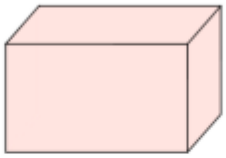


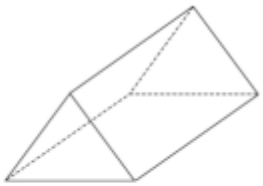
Sparx – Homework Answers

Week 2

Question 1: For each 3D shape below, write down how many edges, faces and vertices it has.

(a) 

(b) 

(c) 

(d) 

(e) 

(f) 

12. Complete the table below.

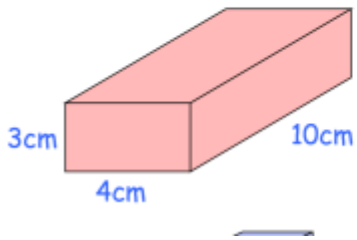
	Faces	Edges	Vertices
Cube			8
Square-based Pyramid	5		
Triangular Prism		9	

Sparx – Homework Answers

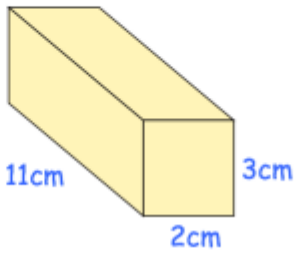
Week 3

Question 1: Work out the volume of each cuboid.
Include suitable units.

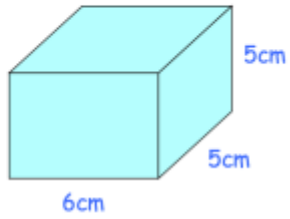
(a)



(b)

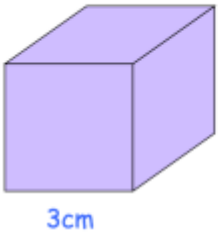


(c)

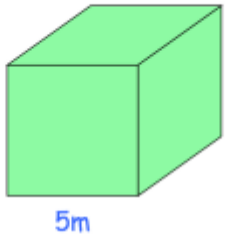


Question 2: Work out the volume of each cube.
Include suitable units.

(a)



(b)



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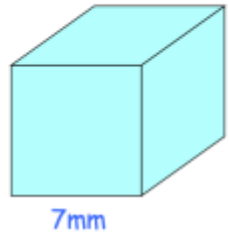
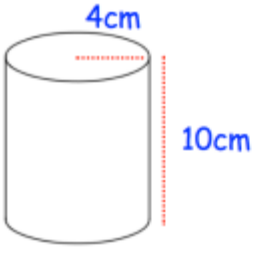


Question 1: Work out the volume of each cylinder.
Give each answer to one decimal place.

(a)



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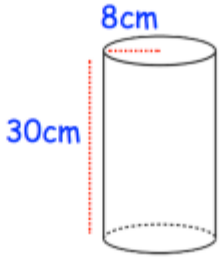

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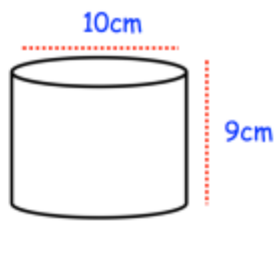
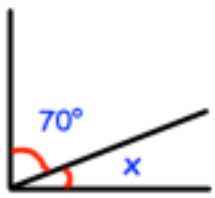


Sparx – Homework Answers

Week 4

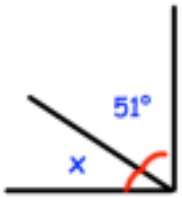
Question 1: Calculate the size of the missing angles

(a)



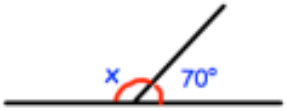
(b)

(c)

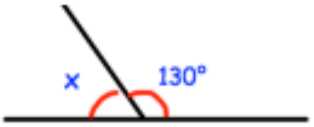


Question 2: Calculate the size of the missing angles

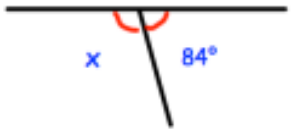
(a)



(b)

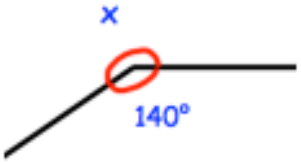


(c)

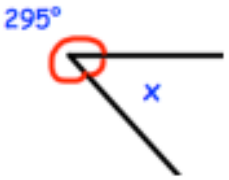


Question 3: Calculate the size of the missing angles

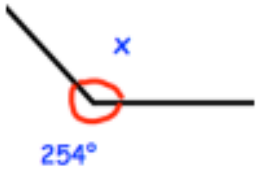
(a)



(b)

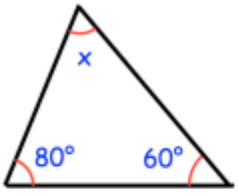


(c)



Question 1: Find the size of each missing angle.

(a)



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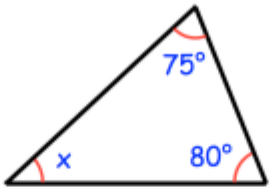
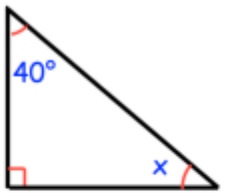
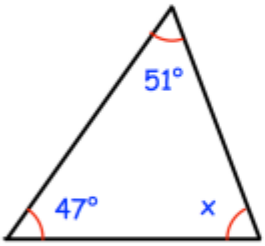


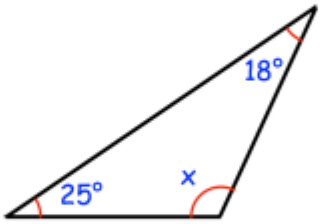
(c)



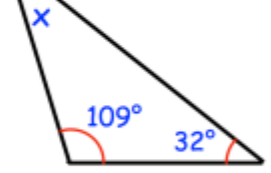
(d)



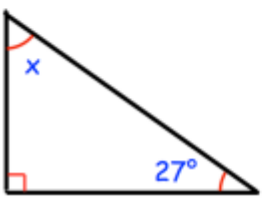
(e)



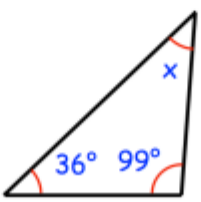
(f)



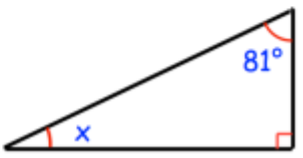
(g)



(h)



(i)

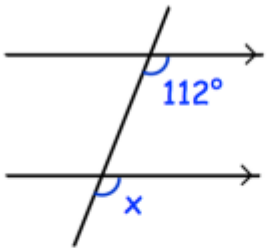


Sparx – Homework Answers

Week 5

Question 1: Write down the sizes of the lettered angles.

(a)



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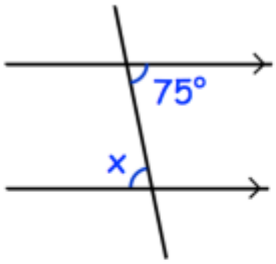

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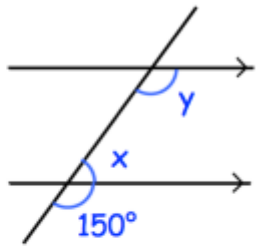

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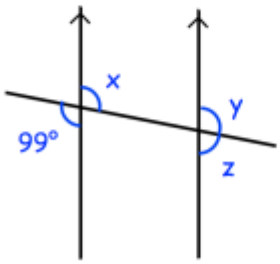
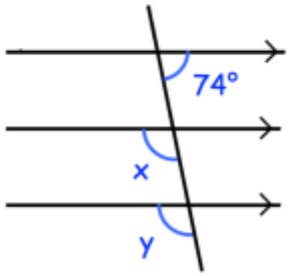
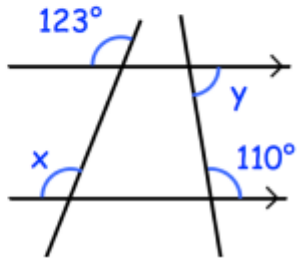


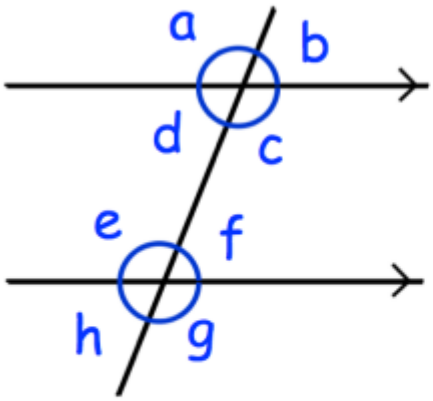
(e)



(f)



Question 2:



(a) Which angle is corresponding to angle c?

(b) Which angle is alternate to angle d?

(c) Which angle is corresponding to angle h?

(d) Which angle is vertically opposite to angle a?

(e) Which angle is alternate to angle e?

(f) Which angle is co-interior with angle c?

(g) Which angle is vertically opposite to angle h?

(h) Which angle is co-interior with angle e?

(i) Which angle is corresponding to angle a?

(j) Which angle is vertically opposite to angle g?

Sparx – Homework Answers

Week 6

Give reasons for your answers.

Sparx – Homework Answers