

Nov 09/11

ANGLE PROPERTIES (Polygons & Lines)

Examiner only

10. (a) Find the size of the angle marked x .

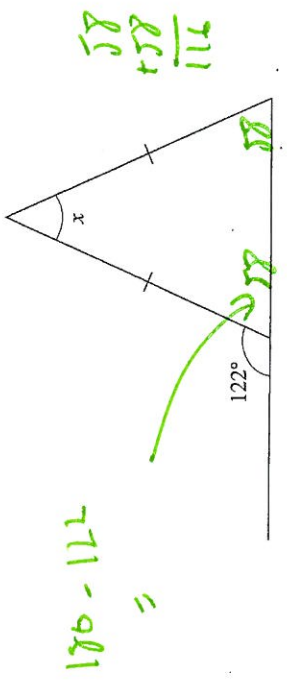


Diagram not drawn to scale.

$180 - 122 =$

$x = 64$

[3]

(b) Find the size of the angle marked y .

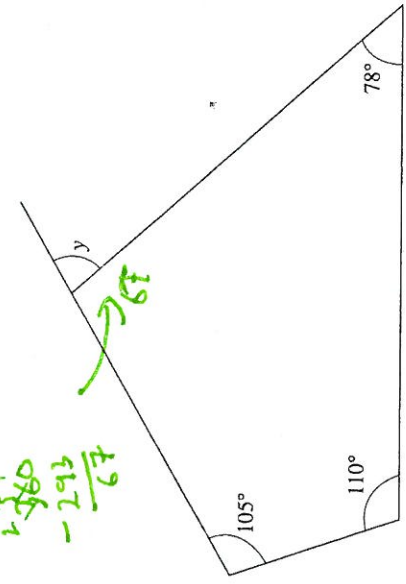


Diagram not drawn to scale.

$180 - 67 = 113$

$y = 113$

[3]

(185/07)

Turn over.

Nov M P1

Examiner only

11. (a) Calculate the size of the angle marked x .

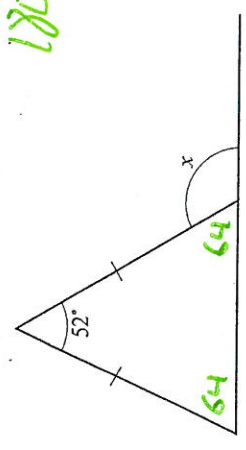


Diagram not drawn to scale

$180 - 64$

$x = 116$

[3]

(b) Calculate the size of the angle marked y .

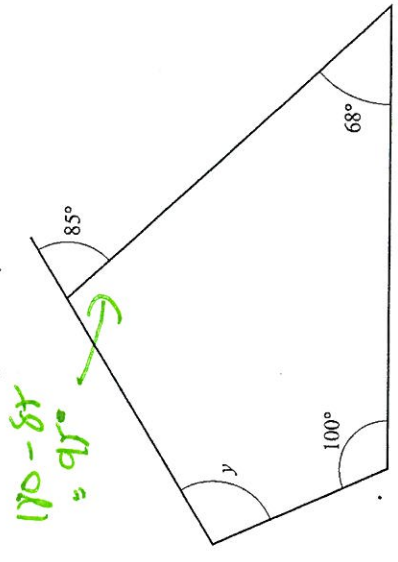


Diagram not drawn to scale

$360 - 263 = 97$

$y = 97$

[3]

(185/07)

Jan 10 P5

11. (a) Find the size of the angle marked x .

$180 - 48 = 132$

$132 \div 2 =$

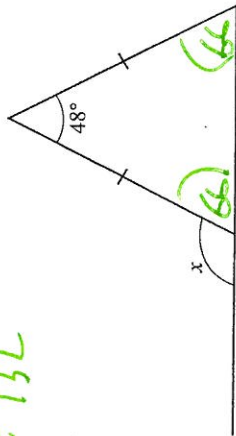


Diagram not drawn to scale

$180 - 66 = 114$

$x = 114^\circ$

[3]

(b) Find the size of the angle marked y .

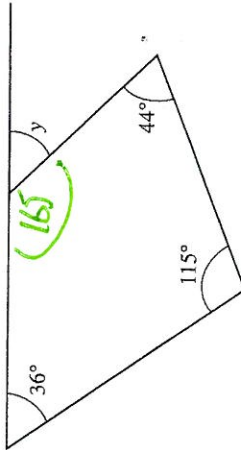


Diagram not drawn to scale

$$\begin{array}{r} 36 \\ + 115 \\ \hline 195 \end{array}$$

$$\begin{array}{r} 360 \\ - 195 \\ \hline 165 \end{array}$$

$180 - 165 = 15$

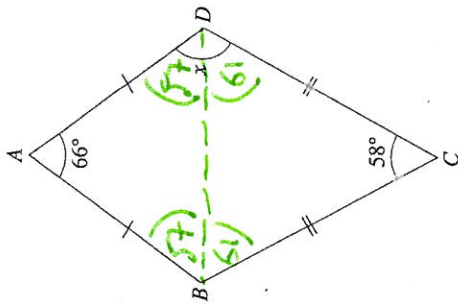
$y = 15^\circ$

[3]

11. (a) ABCD is a kite. Calculate the size of the angle marked x .

$180 - 66 = 114$

$114 \div 2 = 57$



$180 - 58 = 122$

$122 \div 2 = 61$

$x = 57 + 61 = 118^\circ$

[3]

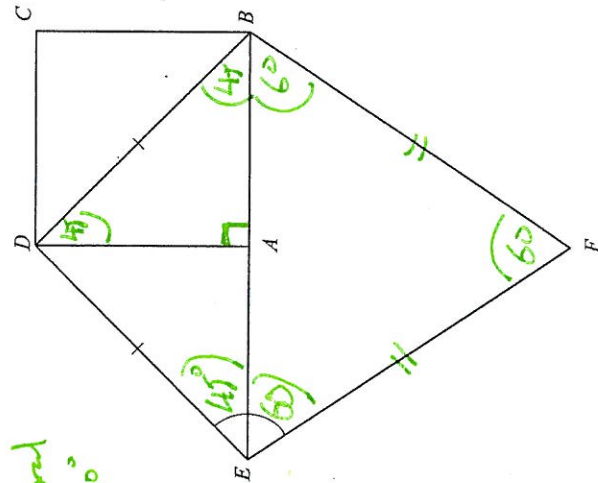
~~(b)~~

A cone is labelled P.
A tetrahedron is labelled Q.
A square-based pyramid is labelled R.
A cuboid is labelled S.
Complete the following table. One has been done for you.

Property of the shape	Label on shape
It has one circular face	P
All its faces are rectangles	
It has exactly 5 vertices	
All its faces are triangles	

[3]

12. In the diagram below $ABCD$ is a square, the triangle BDE is isosceles with $DE = DB$, and the triangle BEF is equilateral. Calculate the size of \hat{DEF} . [5]

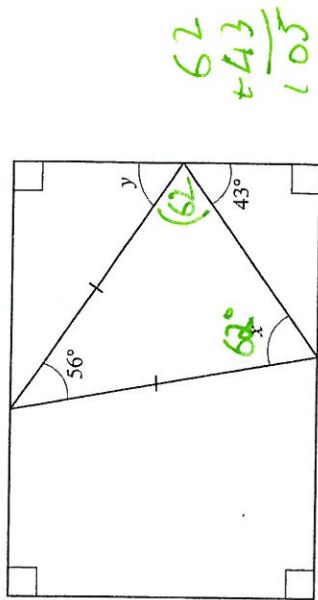


$\triangle BEF$ equilateral
 \therefore angles = 60°
 ABD is isosceles.
 $180 - 90 = 90$
 $90 \div 2 = 45^\circ$

Diagram not drawn to scale

$\hat{DEF} = 60 + 45 = 105^\circ$

- 13.



$180 - 56 = 124$
 $124 \div 2 = 62^\circ$

62
 $+ 43$
 \hline
 105

- (a) Find the size of the angle marked x .

$x = 62^\circ$

[3]

- (b) Find the size of the angle marked y .

$180 - 105 = 75^\circ$

[3]



June 11 11