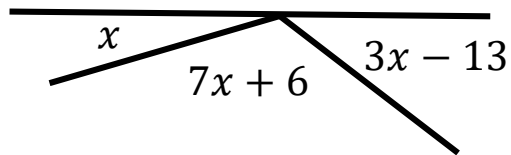
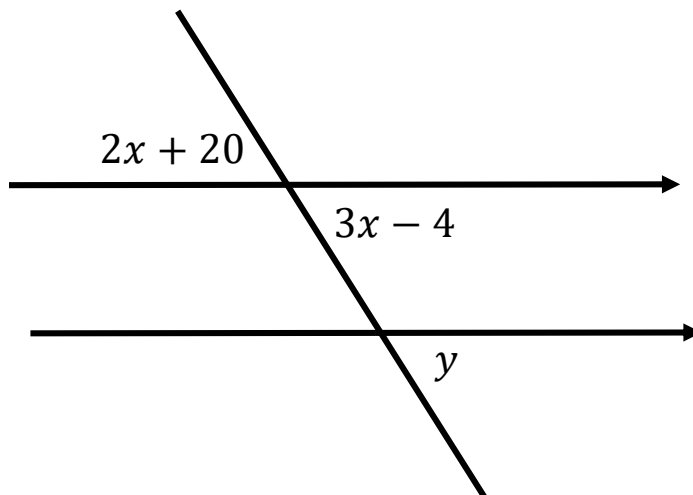


1. Calculate  $x$ .



$x = \dots 17^\circ \dots$   
(2 marks)

2. Calculate  $y$ .



$2x + 20 = 3x - 4$   
 $x = 24$

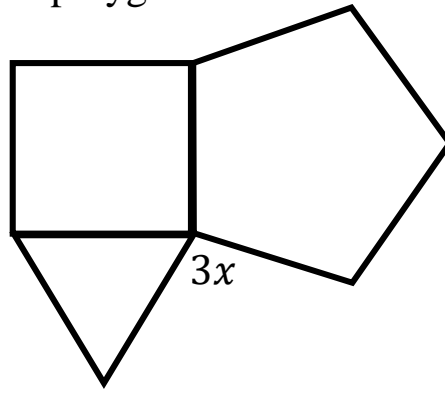
$y = 68^\circ$   
 $\dots \dots \dots$   
(3 marks)

3. The bearing of ship A to ship B is  $307^\circ$   
Calculate the bearing of A from B

$127^\circ$   
 $\dots \dots \dots$   
(2 marks)

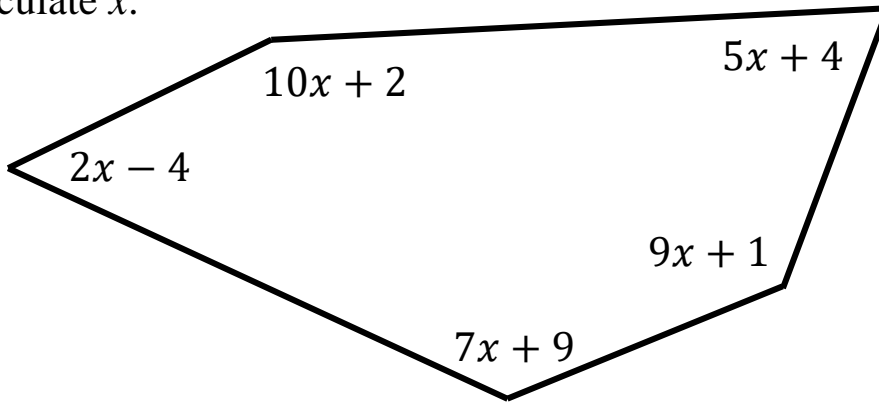
4. Here is are three regular polygons.

Calculate  $x$ .



$x = \dots\dots\dots 34^\circ$   
(2 marks)

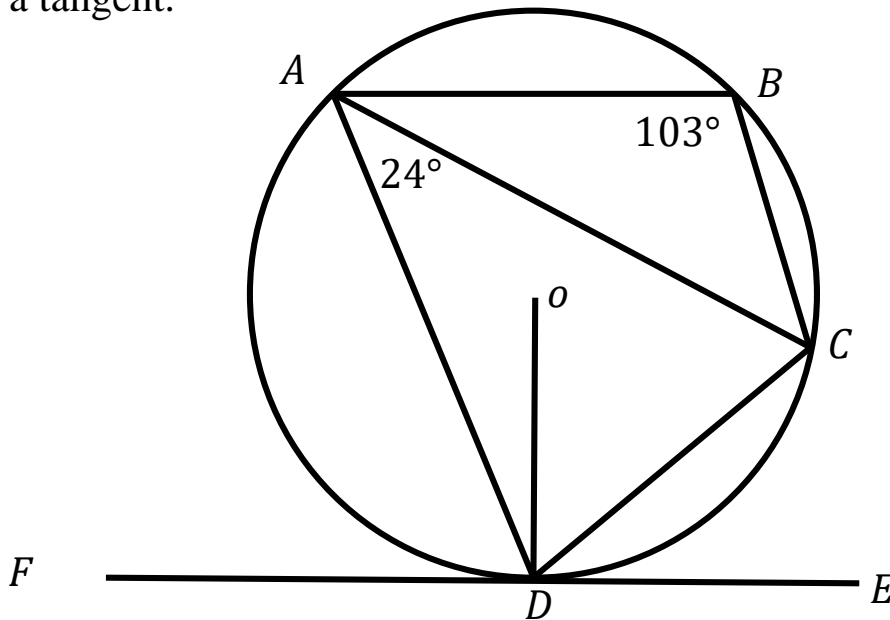
5. Calculate  $x$ .



$x = \dots\dots\dots 16^\circ$   
(2 marks)

6. Points  $A$ ,  $B$ ,  $C$  and  $D$  are points on the edge of a circle center  $O$ .

$FE$  is a tangent.



(a) Calculate the size of angle  $ODC$ .

$\dots\dots\dots 66^\circ$

(b) Calculate the size of angle  $ADO$ .

$\dots\dots\dots 37^\circ$

(3 marks)

Score =