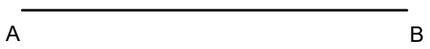
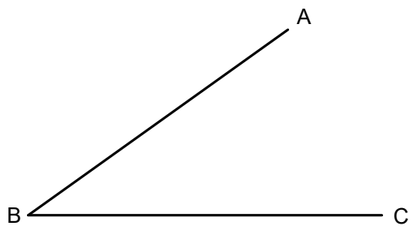
1 By means of construction, divide line segment AB equally and name the bisecting point C.



MARK OBTAINED	
MAXIMUM	4

2 Bisect, by means of construction, the angle A, B, C.



MARK OBTAINED	
MAXIMUM	4

3 Use line segment AB and determine, by means of construction, an angle of 60° at A.

MARK OBTAINED	
MAXIMUM	4

QUESTION: GEOMETRICAL CONSTRUCTIONS

Given:
Several assignments with questions regarding geometrical constructions

Instructions:
Answer each question in the area provided.

Note:
Show all construction lines.
Marks will be subtracted for the following:

- untidy and wrong line quality
- mistakes on measuring with a tolerance larger that 1 mm.

[60]

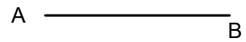
4 Use line segment AB and determine, by means of construction, an angle of 30° at A.

MARK OBTAINED	
MAXIMUM	5

5 Determine, by means of construction, from point D, a line, 90° towards line segment AB.

MARK OBTAINED	
MAXIMUM	5

6 Use line segment AB and determine, by means of construction, an angle of 45° at A.

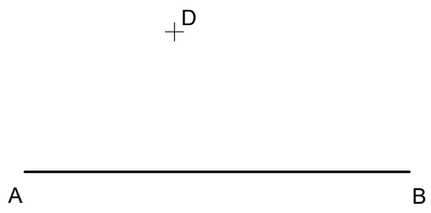


MARK OBTAINED	
MAXIMUM	6

7 Use line segment AB and determine, by means of construction, an angle of 120° at A.

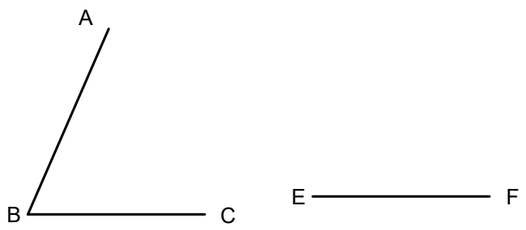
MARK OBTAINED	
MAXIMUM	4

8 Determine, by means of construction, from point D, a line 90° towards line segment AB.



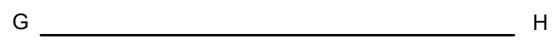
MARK OBTAINED	
MAXIMUM	5

9 Copy, by means of construction, the same sized angle found at ABC towards line segment EF to form DEF.



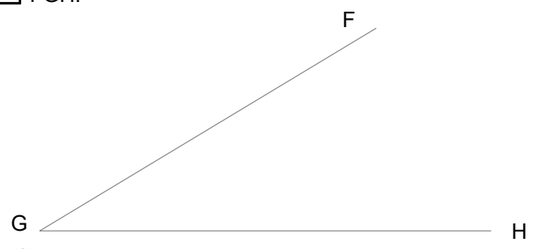
MARK OBTAINED	
MAXIMUM	4

10 Use line segment GH and by means of construction, divide line segment GH in seven equal parts.



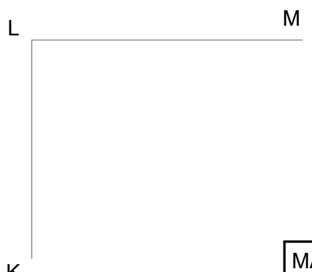
MARK OBTAINED	
MAXIMUM	4

11 Determine a fillet with a radius of 10 mm (R10) at angle FGH.



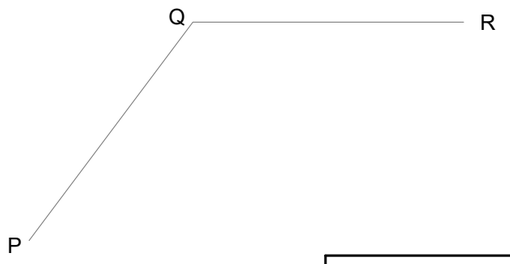
MARK OBTAINED	
MAXIMUM	5

12 Determine a fillet with a radius of 15 mm (R15) at angle KLM.



MARK OBTAINED	
MAXIMUM	5

13 Determine a fillet with a radius of 20 mm (R20) at angle PQR.



MARK OBTAINED	
MAXIMUM	5

ASSESSMENT CRITERIA				
1	Bisecting a line	4		
2	Bisecting an angle	4		
3	Determine 60°	4		
4	Determine 30°	5		
5	Determine 90°	5		
6	Determine 45°	6		
7	Determine 120°	4		
8	Determine 90°	5		
9	Copy an angle	4		
10	Dividing a line	4		
11	Fillet	5		
12	Fillet	5		
13	Fillet	5		
	TOTAL	60		

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GEOMETRICAL CONSTRUCTIONS	ESTIMATED TIME FOR COMPLETION	35 MIN	GRADE 10	NAME & SURNAME		TASK 2.1	PAGE 7
	YOUR TIME OF COMPLETION	MIN					