

**1** By means of construction, determine from B a common tangent line to the given circle.

MARK OBTAINED	
MAXIMUM	6

**2** By means of construction, draw an external common tangent line to two unequal circles.

MARK OBTAINED	
MAXIMUM	10

**3** Determine, by means of construction, draw an internal common tangent line to two unequal circles.

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 than 1 mm.

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**4** Determine by means of construction an external tangent arc (R75) including the two circles A and B.

MARK OBTAINED	
MAXIMUM	6

**5** Determine by means of construction an internal tangent arc (R17) excluding the two circles A and B.

MARK OBTAINED	
MAXIMUM	6

**6** Determine by means of construction, a common arc including A, B and C.

MARK OBTAINED	
MAXIMUM	11

**7** Determine by means of construction, a circumscribed circle including K, L and M.

MARK OBTAINED	
MAXIMUM	9

**8** Determine by means of construction, an inscribed circle inside PQR.

MARK OBTAINED	
MAXIMUM	12

ASSESSMENT CRITERIA			
1	Tangent line from B	6	
2	External tangent line	10	
3	Internal tangent line	4	
4	External tangent arc	6	
5	Internal tangent arc	6	
6	A common arc	11	
7	Circumscribe circle	9	
8	Inscribe circle	12	
TOTAL		64	

