



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

ENGINEERING GRAPHICS AND DESIGN P2

NOVEMBER 2013

MEMORANDUM

MARKS: 100

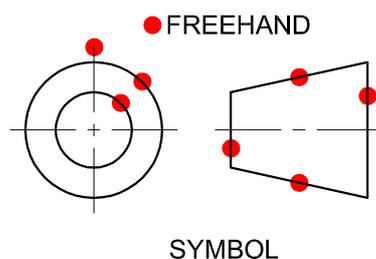
This memorandum consists of 7 pages.

ANSWERS

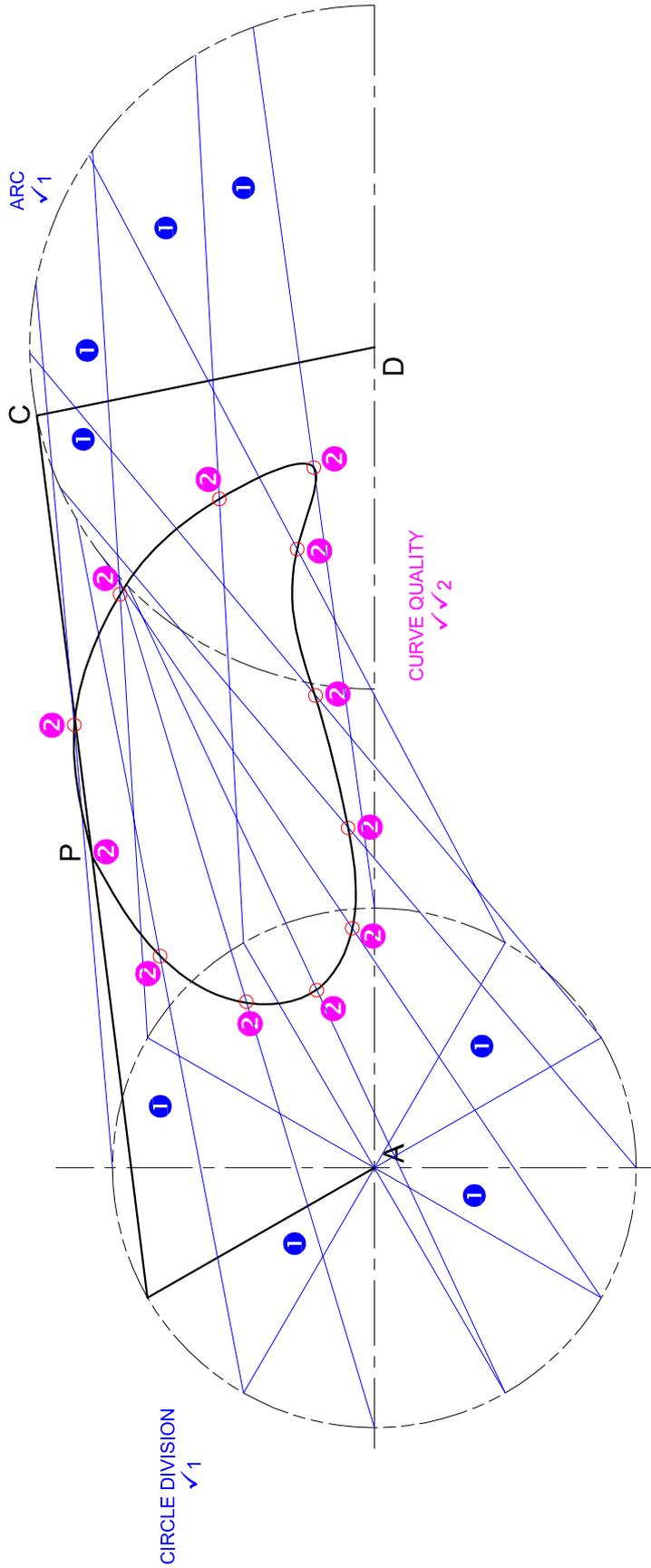
1	2013/05/12	1
2	PRECISION ENGINEERING	1
3	1 : 2	1
4	HARDENING	1
5	2013/05/15	1
6	AWF 3628 W	1
7	FRONT VIEW	1
8	17	1
9	4	1
10	TURNING	1
11	PART SECTION	1
12	(SCREW/EXTERNAL) THREAD	1
13	FILLET	1
14	4 mm	1
15	BLIND THREADED HOLE	2
16	INTERPENETRATION	2
17	100°	2
18	2 mm	2
19	A Ø10 B 60 C M16 D 8	4
20	(See below.)	4

TOTAL: 30

20

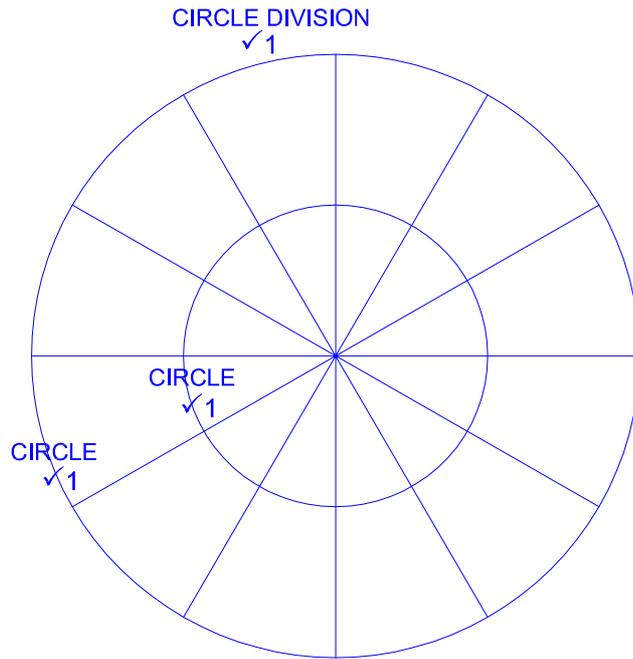


PAPER 2 QUESTION 1
GRADE 12
November 2013
MEMORANDUM

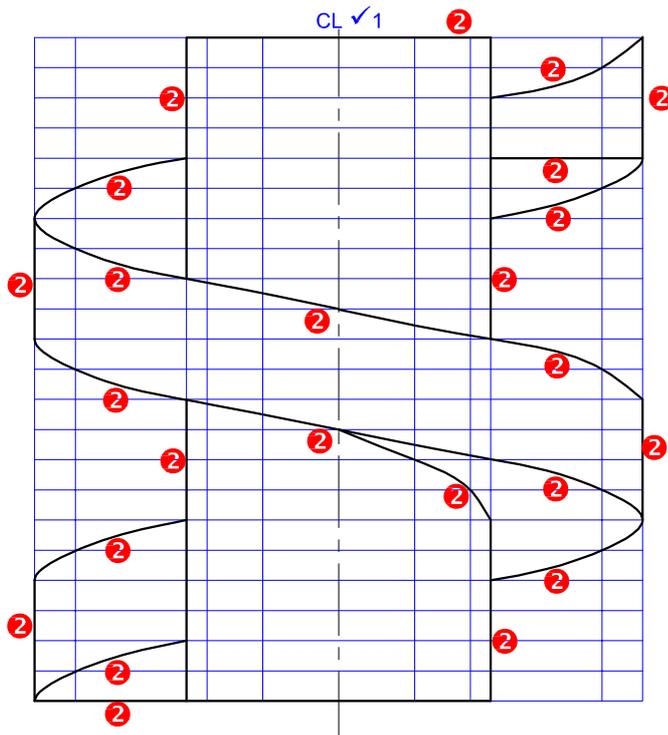


ASSESSMENT CRITERIA		
1	CONSTRUCTION	6
2	LOCUS OF P	8
SUBTOTAL		14

PAPER 2 QUESTION 2.1
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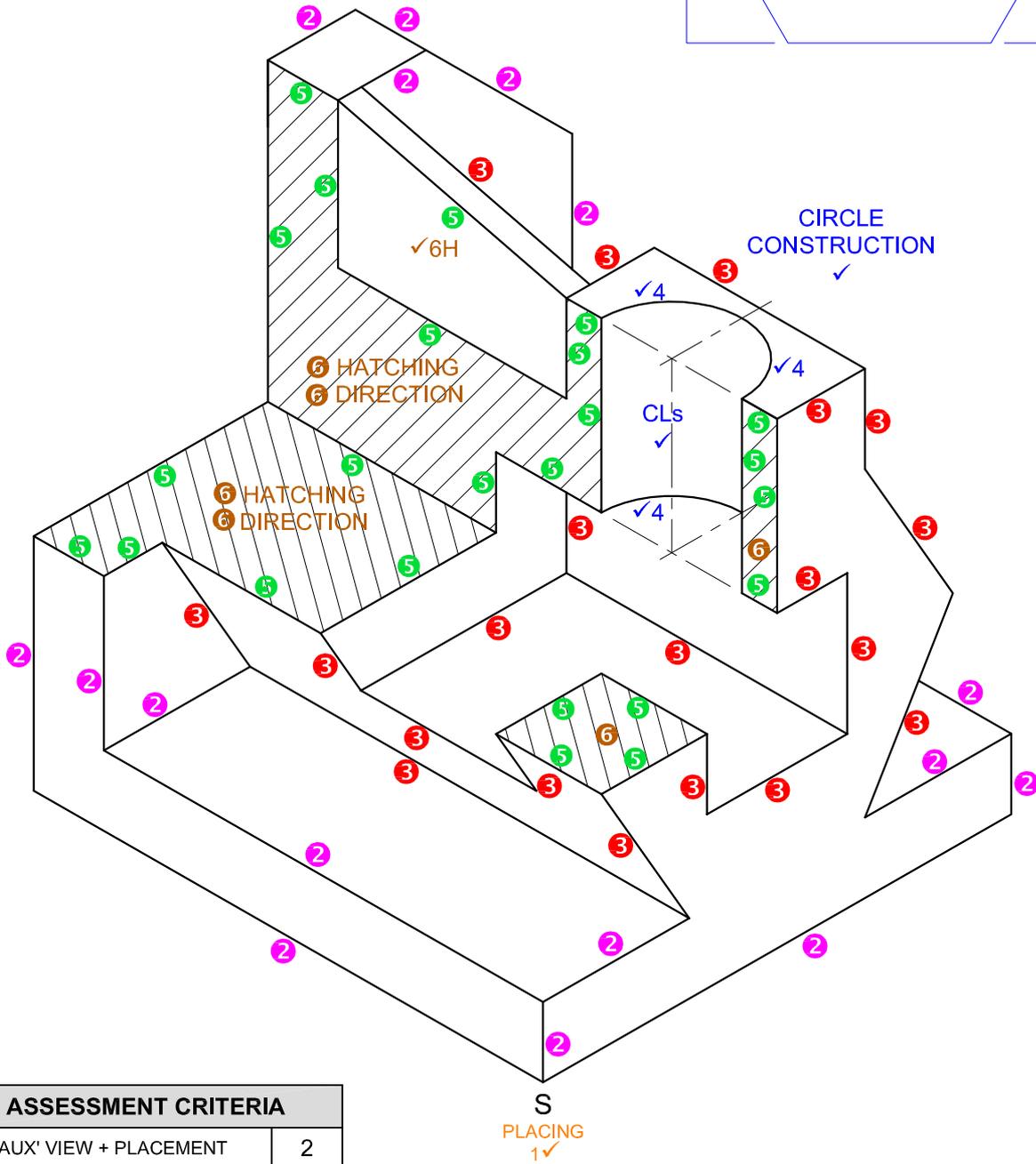
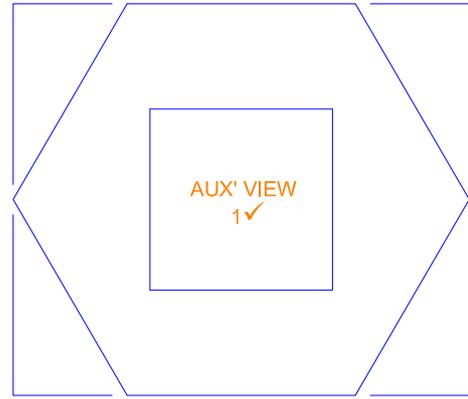


- PITCH ✓1
- HORIZONTAL DIVISION ✓1
- VERTICAL PROJECTION ✓1
- LEFT HAND ✓1



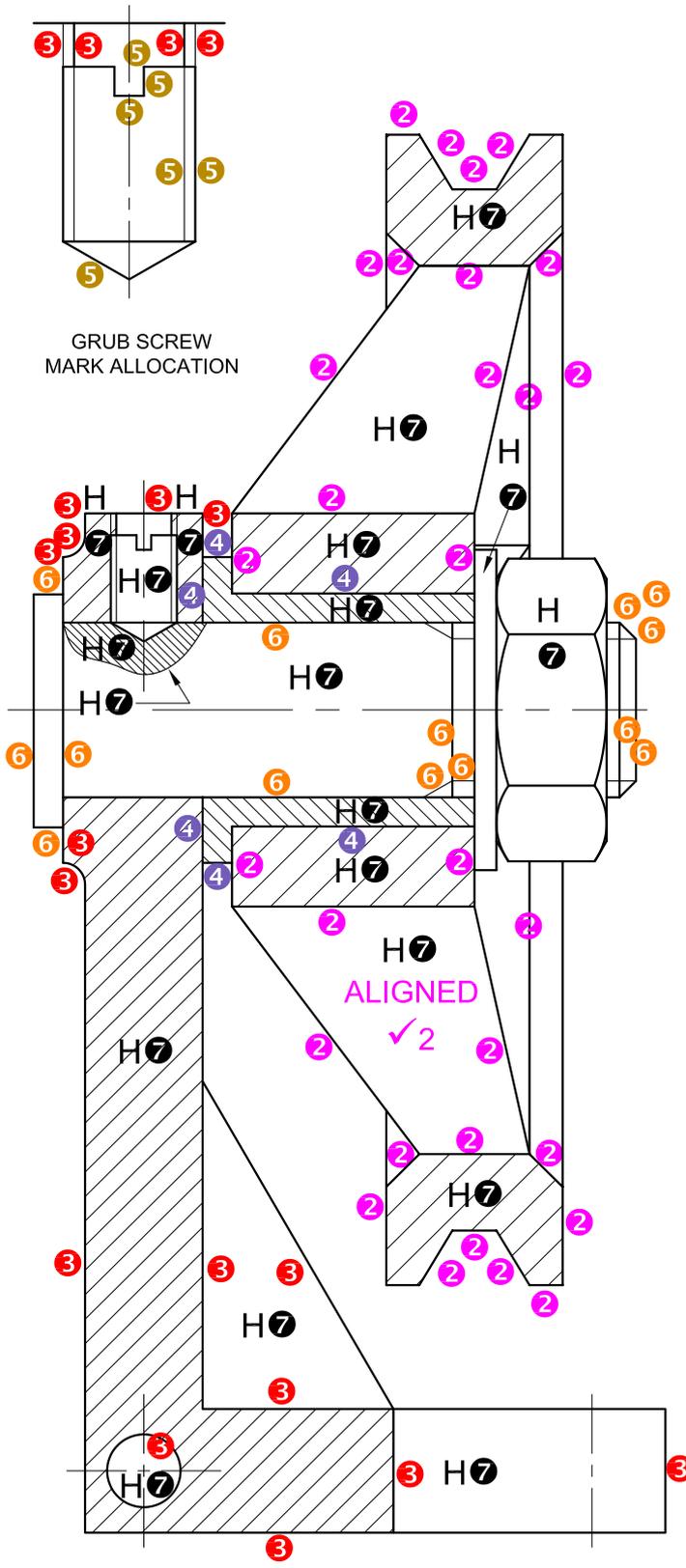
ASSESSMENT CRITERIA		
1	CL + CONSTRUCTION	8
2	CHUTE	12
SUBTOTAL		20

PAPER 2 QUESTION 2.2
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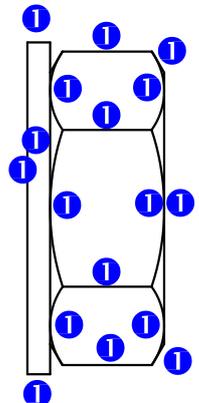


ASSESSMENT CRITERIA		
1	AUX' VIEW + PLACEMENT	2
2	BASE	8
3	HEXAGONAL PRISM	10
4	CIRCLES	5
5	SECTION	12
6	HATCHING	4
	TOTAL	41

PAPER 2 QUESTION 3
 GRADE 12
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GRUB SCREW
MARK ALLOCATION

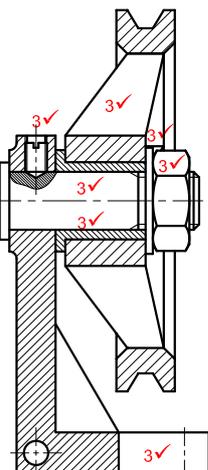
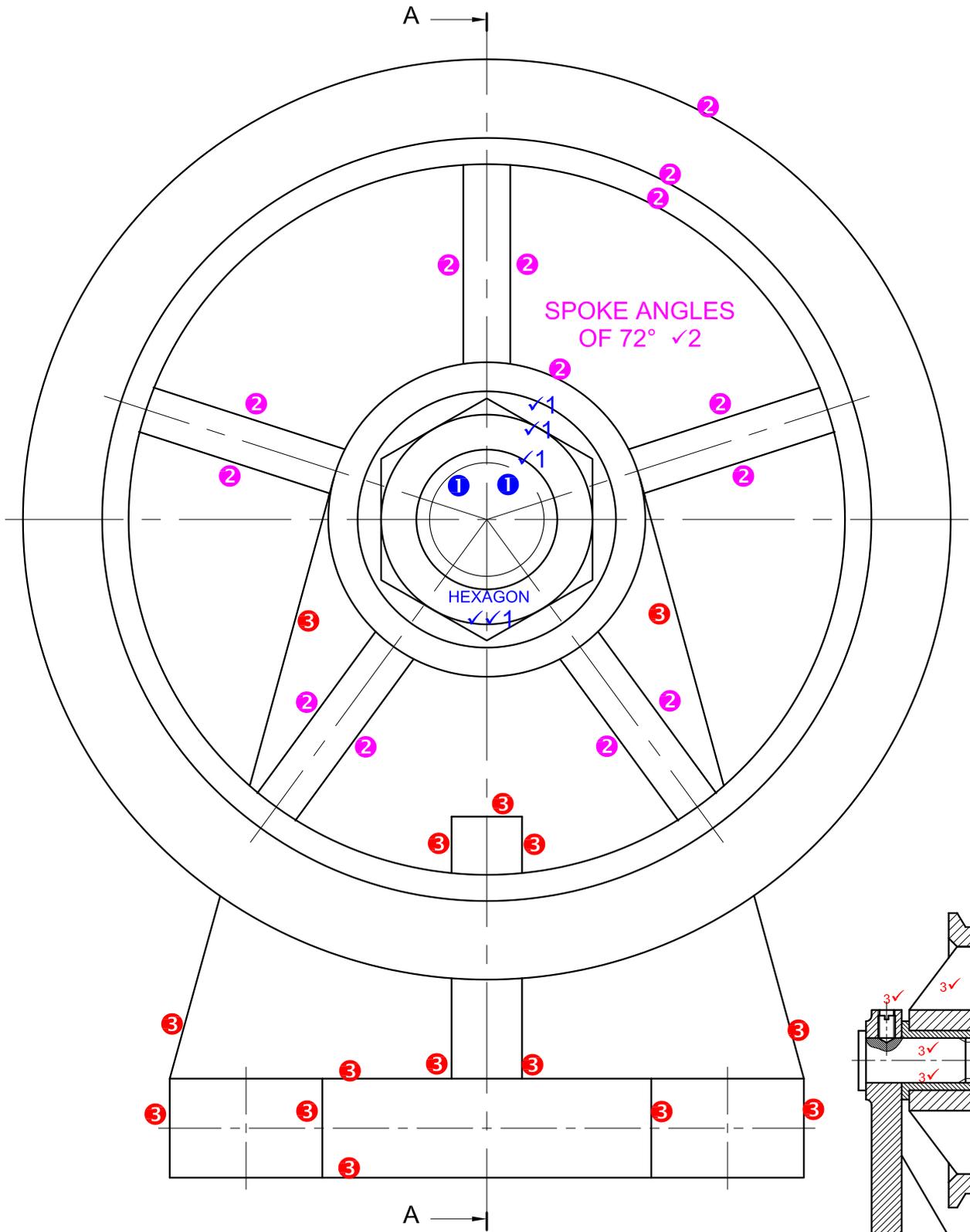


NUT AND WASHER
MARK ALLOCATION

SECTION A-A ③

SECTIONAL FRONT VIEW		
1	M24 NUT + WASHER	8½
2	PULLEY	16
3	BRACKET	9½
4	BUSH	3
5	GRUB SCREW	3
6	SHAFT	7
7	HATCHING	10
SUBTOTAL		57

PAPER 2 QUESTION 4
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1 MARK FOR EACH COMPONENT CORRECTLY ASSEMBLED (7 PARTS -1 = 6)

RIGHT VIEW		
1	M24 NUT + WASHER	6
2	PULLEY	8
3	BRACKET	7½
SUBTOTAL		21½

GENERAL		
1	CENTRE LINES	7
2	CUTTING PLANE + LABEL	3½
3	ASSEMBLY	6
SUBTOTAL		16½

PAPER 2 QUESTION 4
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