

ENGINEERING GRAPHICS AND
DESIGN

PAPER 2

MEMORANDUM

GR 12

SEPTEMBER 2012

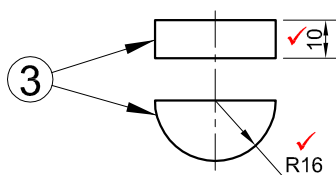


ANSWERS		
1	ANDY	1
2	mm	1
3	SE-25/2011	1
4	VICTORIA STREET	1
5	± 0,25	1
6	COUNTER BORE	1
7	WEB / RIB	1
8	38+144+16=198	1
9	20°	1
10	44+32-16=60	1
11	PART SECTION	1
12	REMOVED SECTION	1
13	SPLIT PIN	2
14	4 mm or 45° x 4	1
15	TO STRENGTHEN THE ARM	2
16		2
17		2
18		4
	TOTAL	25

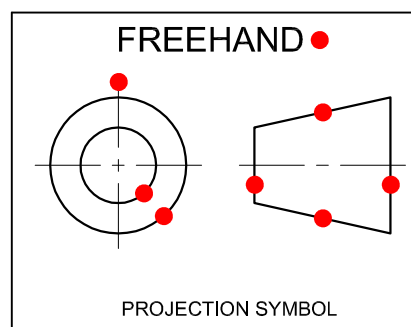
ANSWER 16

PARTS LIST		
PART	QUANTITY	MATERIAL
1. SPINDLE	1	CAST IRON
2. ARM	1	MILD STEEL
3. WOODRUFF KEY ✓	1	MILD STEEL
4. CASTLE-NUT ✓	1	MILD STEEL

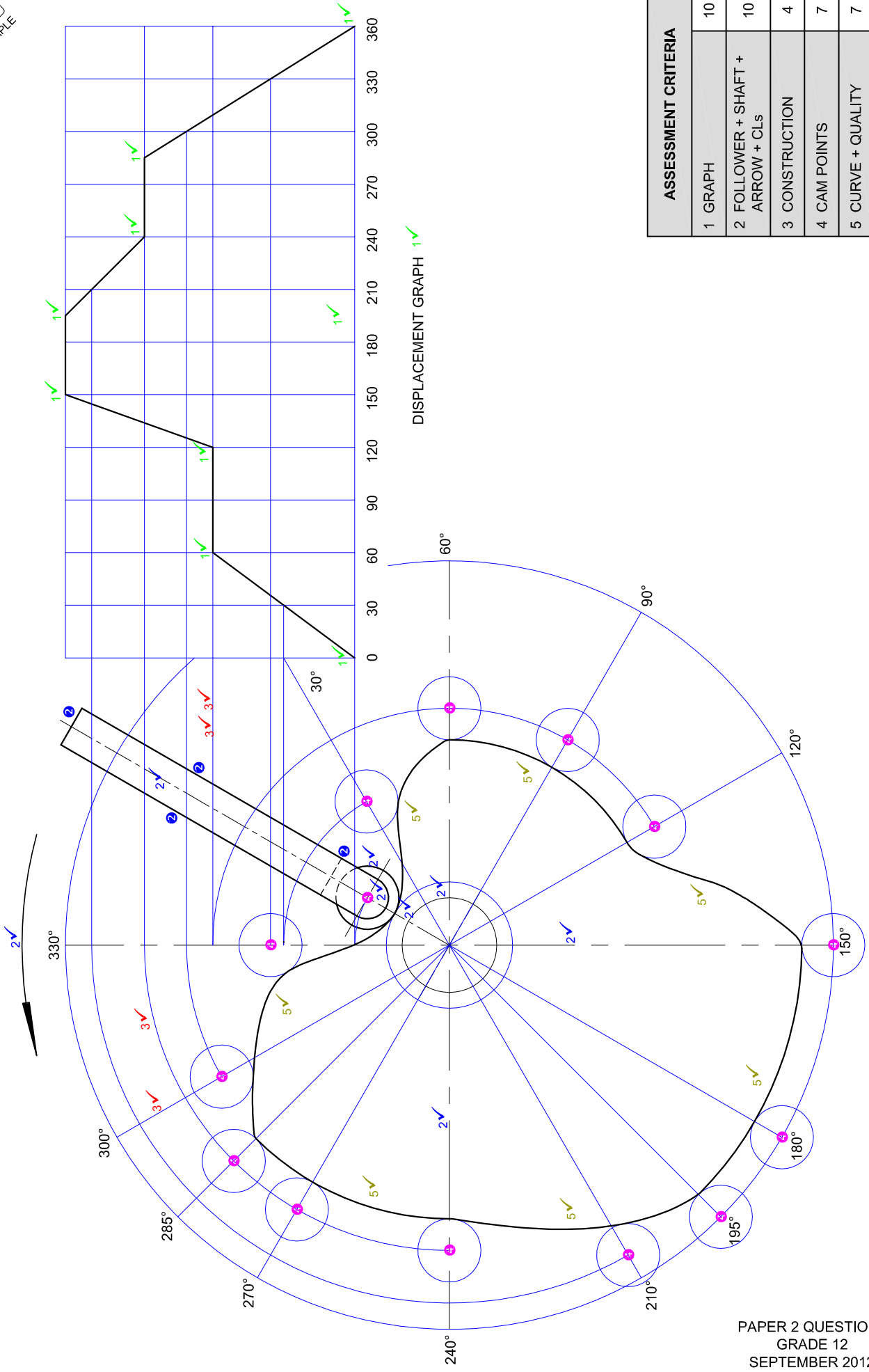
ANSWER 17



ANSWER 18

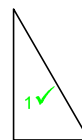
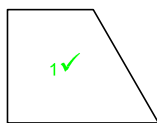
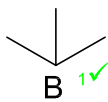
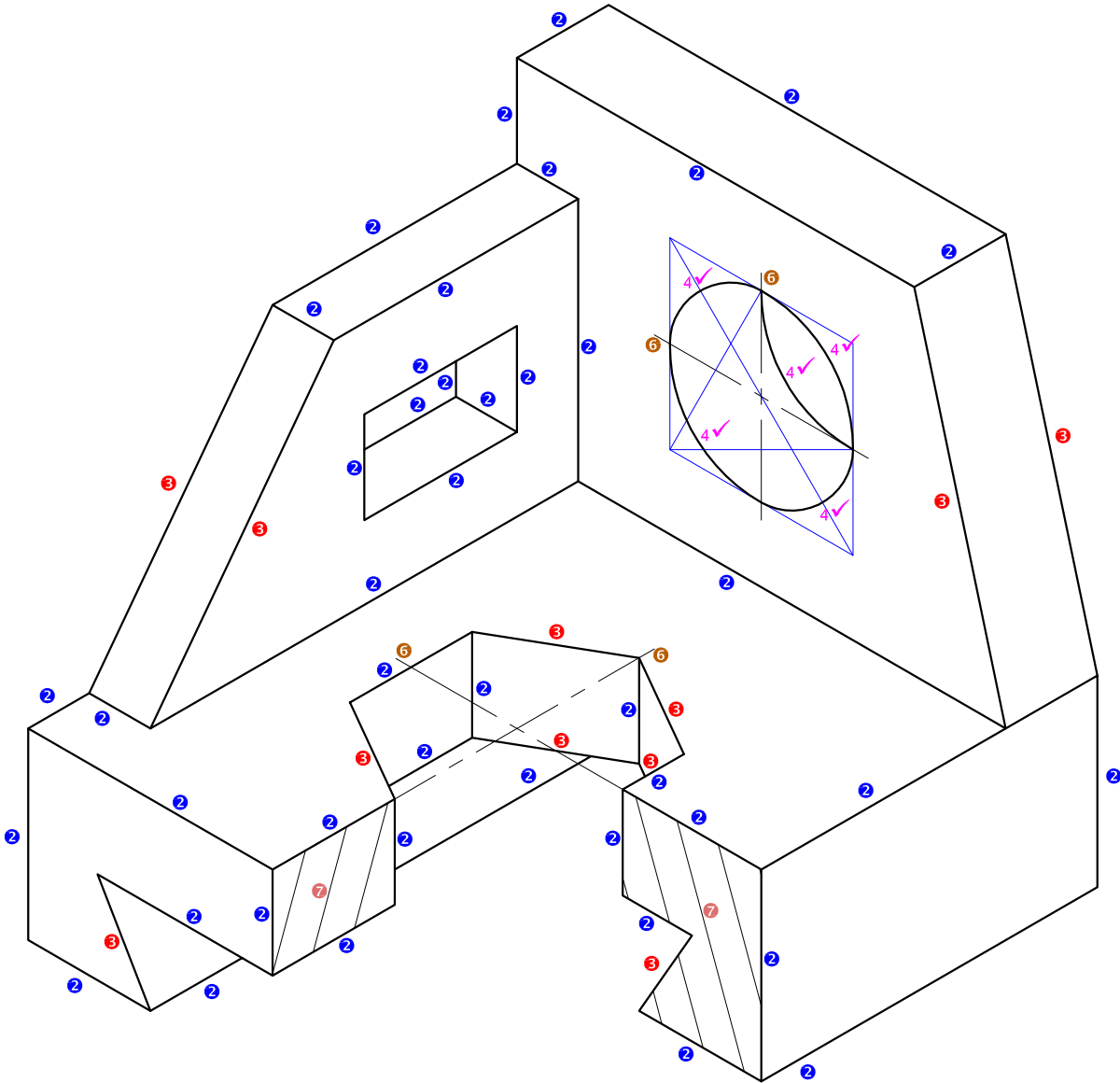


PAPER 2 QUESTION 1
 GRADE 12
 SEPTEMBER 2012
 MEMORANDUM



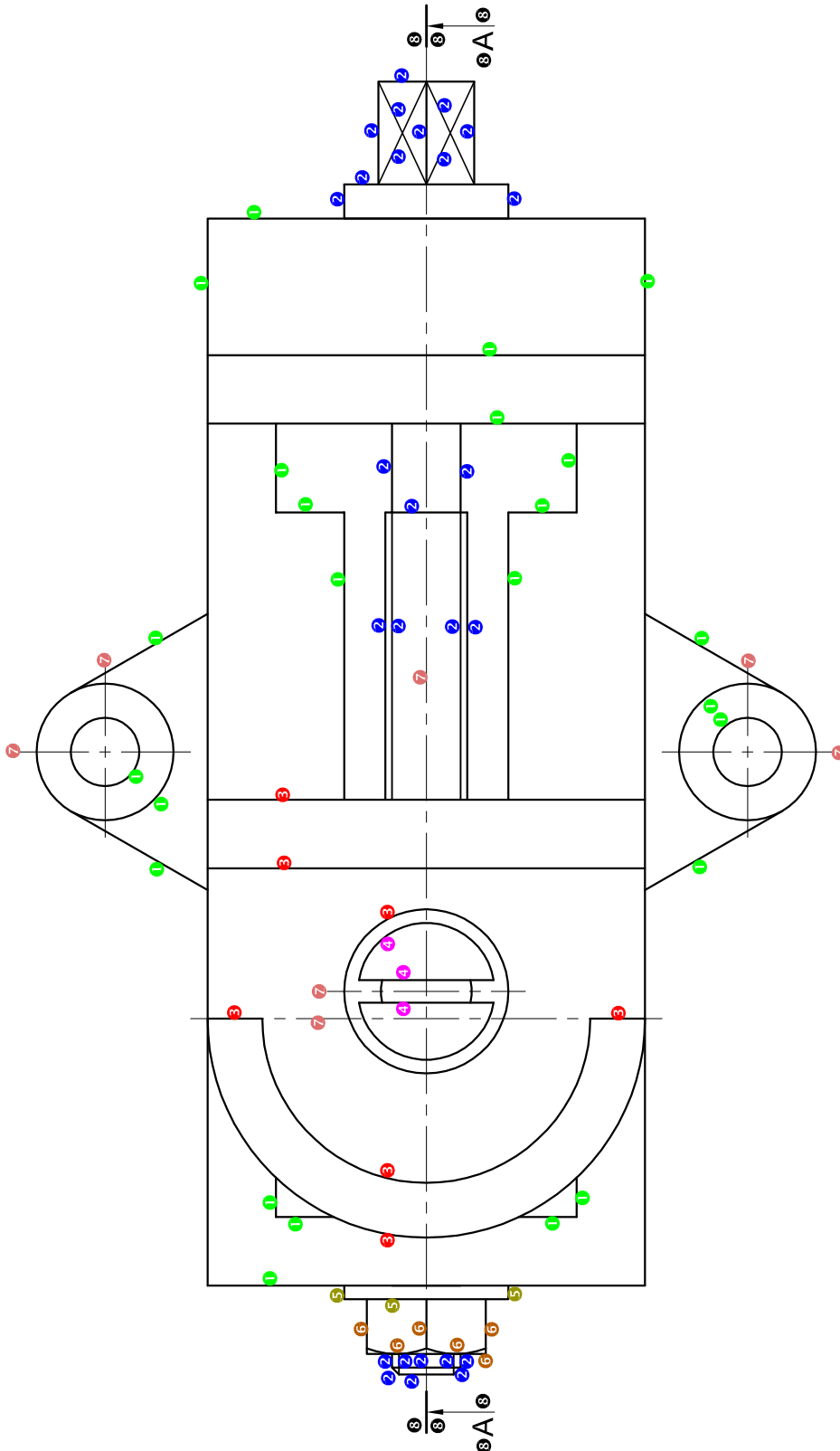
ASSESSMENT CRITERIA	
1 GRAPH	10
2 FOLLOWER + SHAFT + ARROW + CLs	10
3 CONSTRUCTION	4
4 CAM POINTS	7
5 CURVE + QUALITY	7
TOTAL	38

PAPER 2 QUESTION 2
 GRADE 12
 SEPTEMBER 2012
 MEMORANDUM



ASSESSMENT CRITERIA	
1. AUX. VIEW + PLACING	3
2. ISOMETRIC LINES	22
3. NON-ISOMETRIC LINES	5½
4. ISOMETRIC CIRCLES	5
5. CIRCLE CONSTRUCTION	1½
6. CENTRE LINES	2
7. HATCHING	1
TOTAL	40

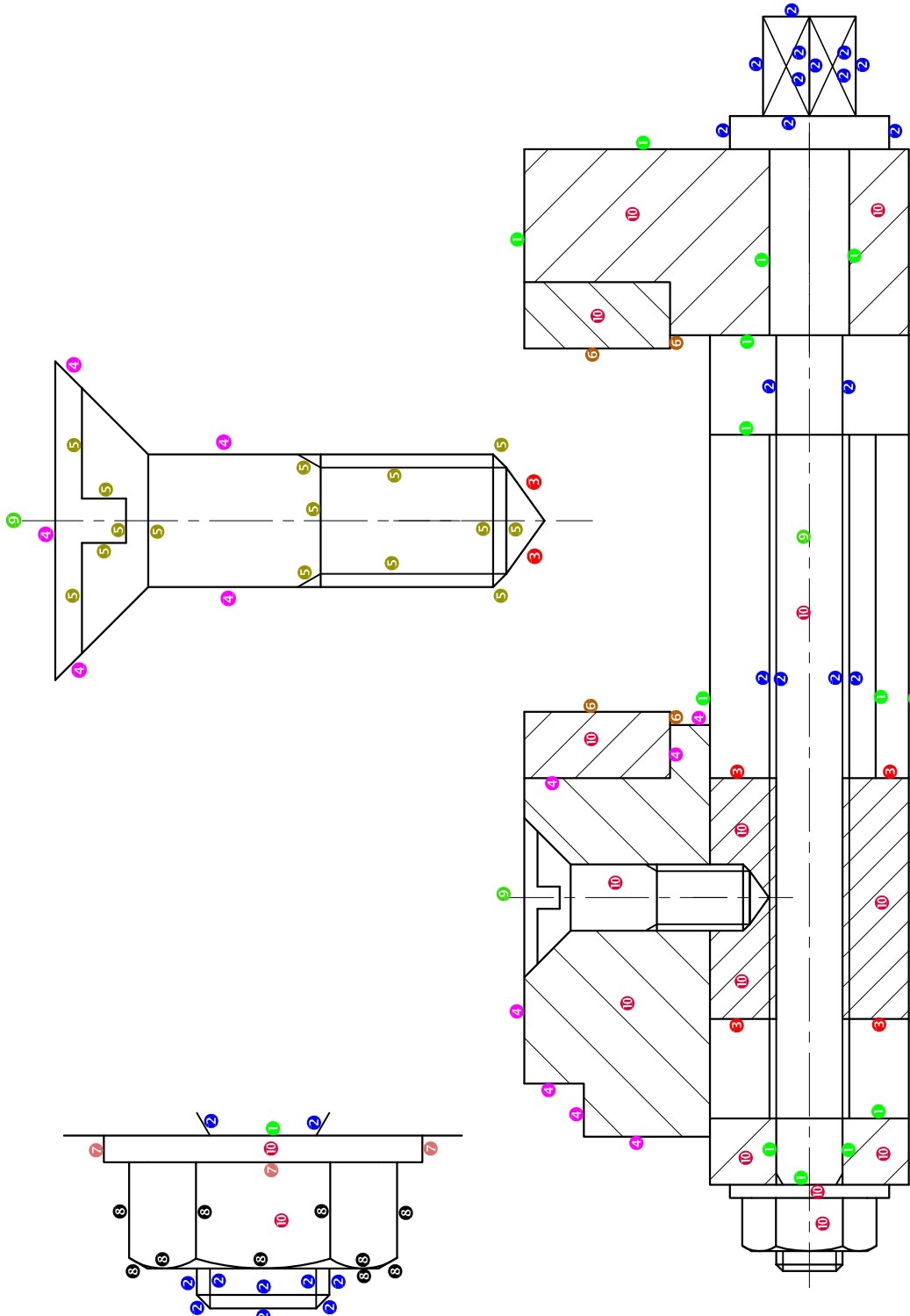
PAPER 2 QUESTION 3
 GRADE 12
 SEPTEMBER 2012
 MEMORANDUM



ASSESSMENT CRITERIA	
TOP VIEW	
1. BASE	12
2. SHAFT	13
3. ROTATING BLOCK	3½
4. M10 SCREW	1½
5. WASHER	1½
6. M10 NUT	3
7. CENTRE LINES	3½
8. SECTION AA	3
SUBTOTAL	41



ASSESSMENT CRITERIA	
SECTIONAL FRONT VIEW	
THIRD ANGLE	2
1. BASE	6½
2. SHAFT	13½
3. SLIDING BLOCK	3
4. ROTATING BLOCK	6
5. M10 SCREW	7½
6. JAWS	2
7. WASHER	1½
8. M10 NUT	5
9. CENTRE LINES	1
10. HATCHING	7
11. LABEL	1
SUBTOTAL	56
TOTAL	97



SECTION AA ¹¹✓