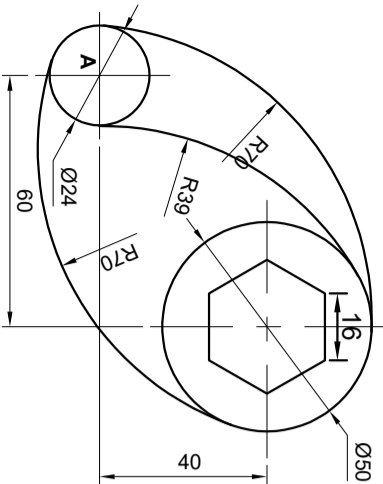


QUESTION 1.1 : GEOMETRICAL CONSTRUCTION

INSTRUCTIONS:

Copy the given figure to a scale 1:1.
 ALL construction and contact points must be shown.
 Use starting point A. [15]



A-A

ASSESSMENT CRITERIA		POSSIBLE OBTAINED
1	CIRCLES & CENTRE LINES	3
2	ARCS & CONTACT POINTS	9
TOTAL		12

QUESTIONS

ANSWERS

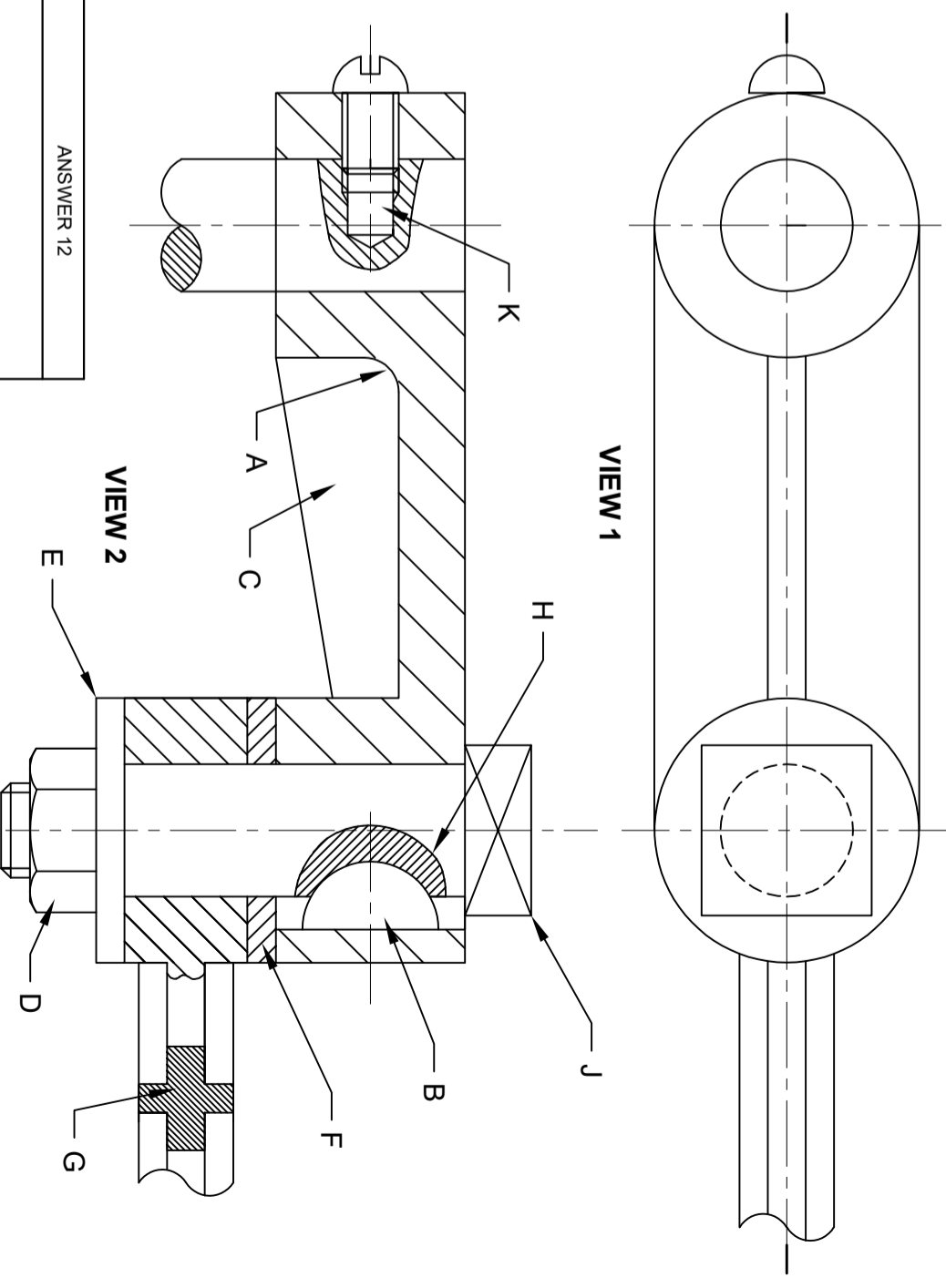
1	How old is the company?		1
2	What is the website address of this company?		1
3	What is the drawing number?		1
4	Where is the company based?		1
5	What is the scale for the drawing?		1
6	What would VIEW 1 be called?		1
7	Identify the following parts as indicated by the letters: A	A	1
		C	1
8	What is the tolerance of the drawing?		1
9	What type of section is shown at point H?		1
10	Fill in the arrows for the cutting plane and label it A - A.		2
11	What is the shape of the feature at point J?		1
12	Complete the projection symbol in the space provided.		2
TOTAL:			15

QUESTION 1.2. : MECHANICAL ANALYTICAL

GIVEN:
 Two views of a GUIDE UNIT and a table of questions based on the drawings.

INSTRUCTIONS:

Complete the table below by neatly answering the questions, which all refer to the accompanying drawing and title panel. [15]



ANSWER 12

DATE	REVISION BY	REVISION DESCRIPTION	No
2012-08-06	MARYNA	ADD MACHINING SYMBOLS	2
2012-08-04	MARYNA	INCREASE TOLERANCE	1

SAMCO
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 EST. 1986

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 DURBAN
 www.SAMCO.co.za
 043 645 7820

CONNECTOR

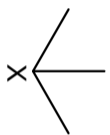
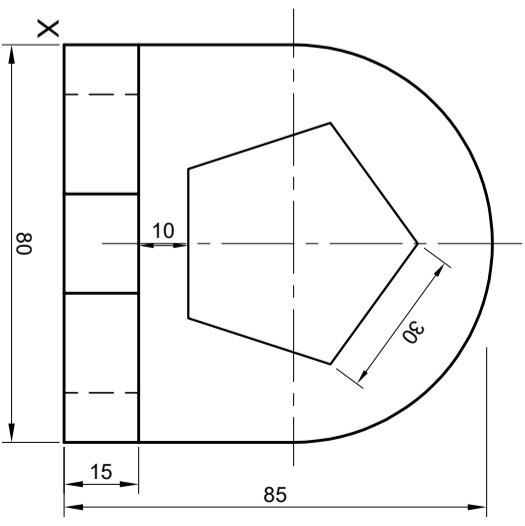
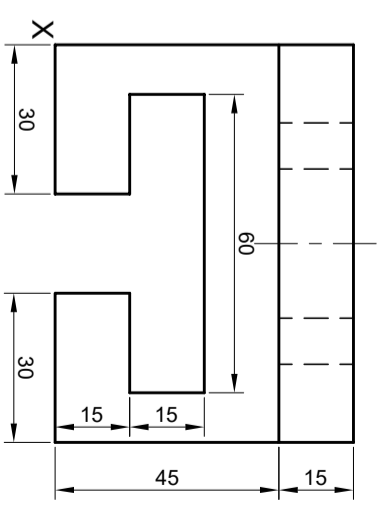
DRAWN BY: NOLWAZI	DATE: 2012-07-15	TITLE
CHECKED BY: AKHEEL	DATE: 2012-07-18	
APPROVED BY: DANIEL	DATE: 2012-07-19	
MATERIAL: CAST IRON	FILE NAME: UFF 335.dwg	
HEAT TREATMENT: NONE	DRAWING No. 12-0967.msc	
SCALE: 1:2		

QUESTION TWO: ISOMETRIC DRAWING

Given:
The front view and top view of a casting.

Instruction:
Use the given views to produce an ISOMETRIC drawing of the block using a scale of 1:1

Make point X the lowest point of your drawing. [25]



ASSESSMENT CRITERIA			
	POSSIBLE	OBTAINED	SIGN
			MODEARTE
1	ISOMETRIC LINES	12 $\frac{1}{2}$	
2	CIRCLE	6 $\frac{1}{2}$	
3	AUXILIARY VIEW	2	
4	PENTAGON	7	
TOTAL		28	

QUESTION 3: MECHANICAL ASSEMBLY

Given:

- The exploded isometric drawing of the parts of a CLAMP and BRACKET assembly, showing the position of each part relative to all the others.
- Orthographic views of each of the parts of the assembly

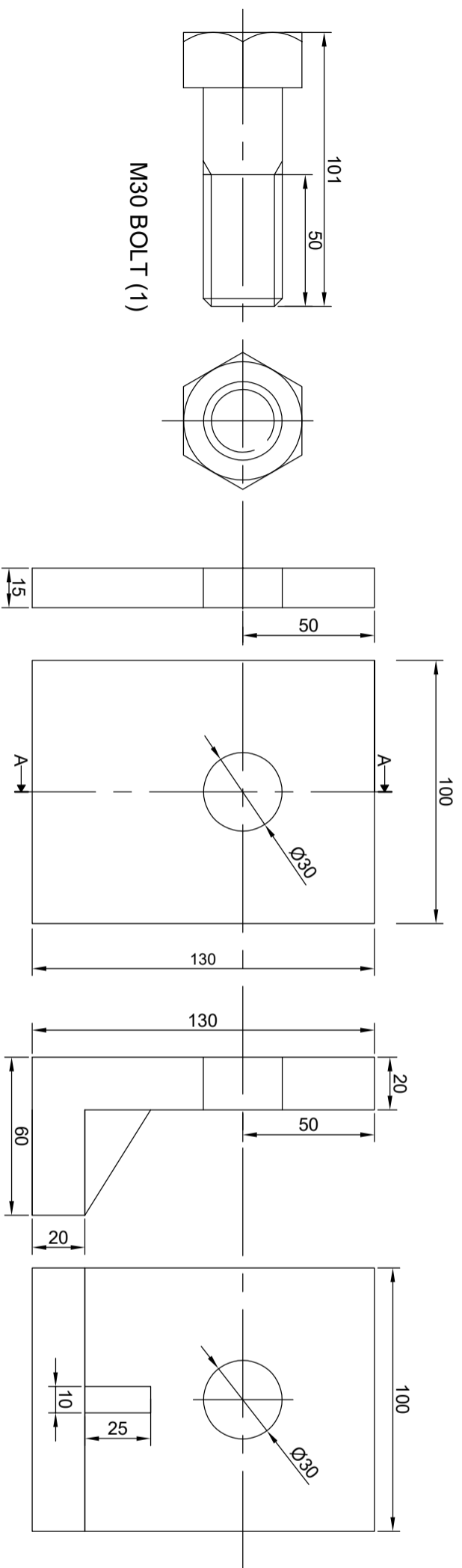
Instructions:

- Draw to a scale of 1:1 and in third angle orthographic projection, on the next page. The following view of the assembled parts of the assembly:
- 2.1. A **sectional front view** on cutting plane A-A, as seen from the direction arrow shown on the exploded isometric drawing. The cutting plane, which passes vertically through the centre of the assembly, is shown on part 2.
- ALL drawing must comply with the guidelines contained in the SANS 10111.

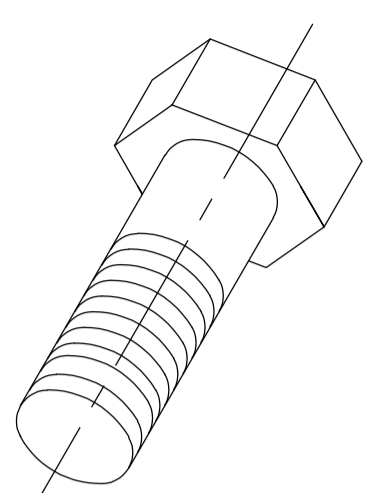
NOTE:

- Planning is essential
- Show **THREE** faces for the nut and **TWO** faces of the bolt head and **ALL** necessary construction.
- Label the sectioned view.
- Print the title and the scale.
- **NO** hidden detail is required.

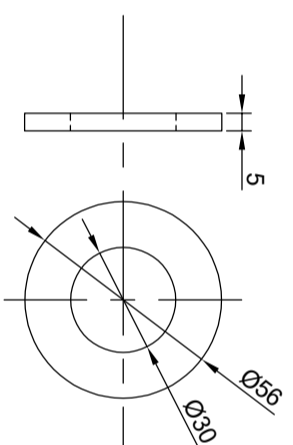
[35]



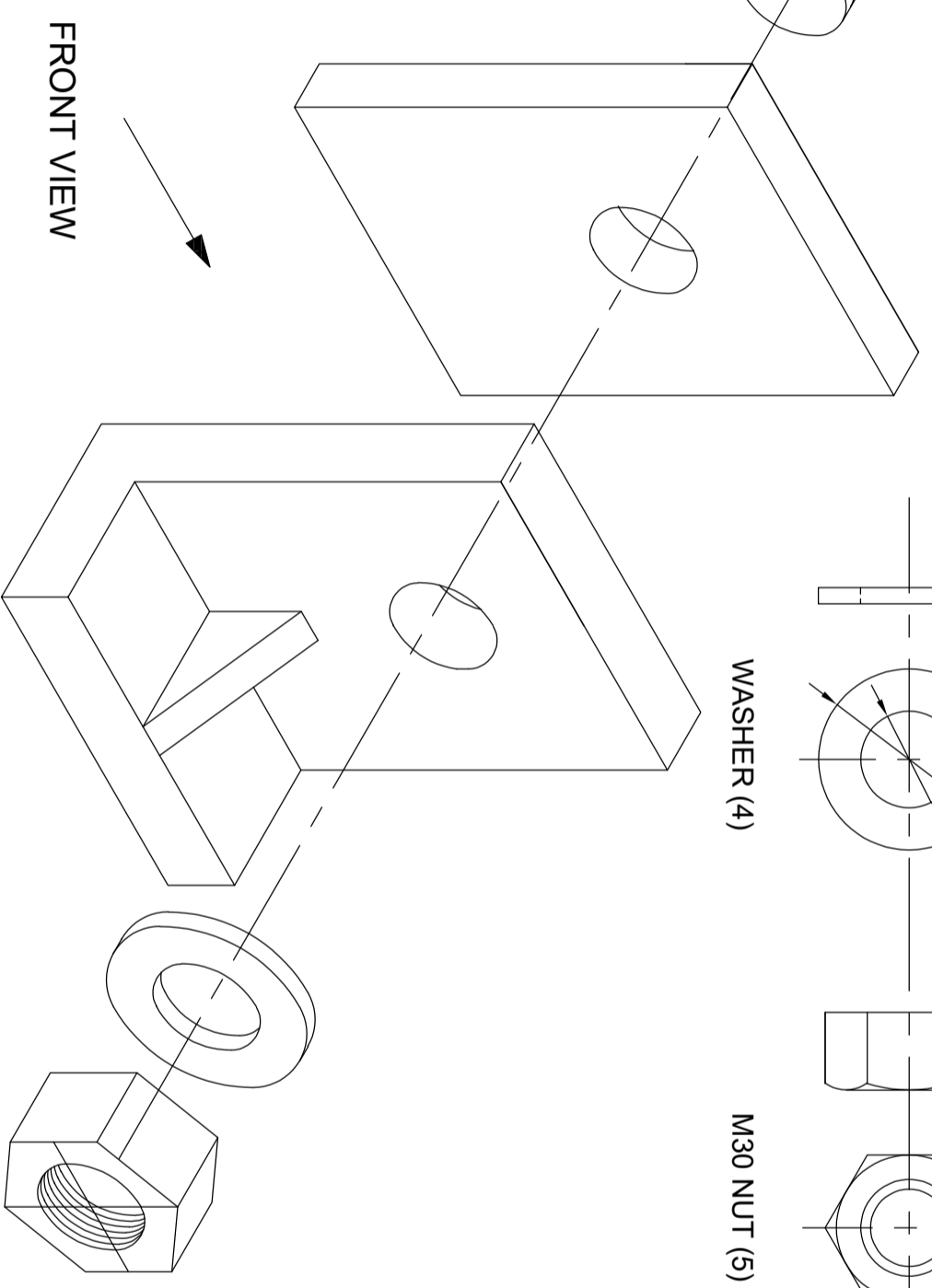
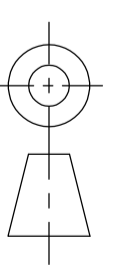
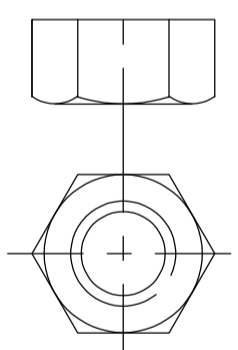
M30 BOLT (1)



WASHER (4)



M30 NUT (5)



PARTS LIST

1	M30 BOLT	1	
2	CLAMP	1	
3	BRACKET	1	
4	WASHER	1	
5	M30 NUT	1	

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