ANSWERS

1	acearc@africa.com / ACEARC@AFRICA.COM	1
2	1 : 450	1
3	30/01/2023	1
4	QUALITY STREET	1
5	351	1
6	BRICK PAVING	1
7	3	1
8	SPEED HUMP	1
9	1 : 40	1
10	2500	1
11	GULLY	1
12	EVERGREEN TREE (TREE = $\frac{1}{2}$)	1
13	ADJACENT BUILDING / CIVIL STRUCTURE	1
14	EXISTING SEWER LINE	1
15	0,15	1
16	RED	1
17	SOUTH EAST / EAST-SOUTH-EAST / SE	2
18	1800	2
19	*See below*	3
20		3
21		4
	TOTAL	**30**

ANSWER 19

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

P = AB + BC + CD + DE + EA

= 40 + 48 + 23,34 + 7,5 + 44,56

= 163,4 ✓ ANSWER IN METRES ✓

ANSWER 20

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

A = (10 x 9,2) + (7,4 x 4) + (6,2 x 3,2)

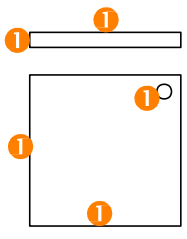
= 92 + 29,6 + 19,84

= 141,44 ✓ m² ANSWER IN SQUARE METRES ✓

ANSWER 21

(a)

NOT FAOP = $-\frac{1}{2}$



(b)

1 FREEHAND

PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2023
MARKING GUIDELINES

ANSWERS		
1	84-0213	1
2	EXPRESS PRINTERS	1
3	PALISADE	1
4	STONE HILL	1
5	1 : 900	1
6	COMPUTER CENTRE / -BUILDING	1
7	4	1
8	ASPHALT	1
9	INSPECTION EYE	1
10	PALM TREE	1
11	GENERATOR	1
12	EAST	1
13	7500	2
14	100-YEAR FLOOD LINE	2
15	WATER CLOSET	1
16	BLACK	1
17	18,6	2
18	*See below*	3
19		3
20		4
	TOTAL	**30**

ANSWER 18

Show ALL calculations.

ADDING OF SIDES (+, +, ...), i.e.: ✓

P = GD + DE + EF + FG

= (50,5 + 33,4 + 36,6 + 30,4) – (3 x 4) ✓

= 138,9 m ✓

CONVERTED TO METERS

ANSWER 19

Show ALL calculations.

APPLYING CORRECT FORMULA, i.e.: ✓

A = L x B

= [(21 x 25) + (29 x 7)] – (11 x 18)

= 728 – 198 ✓

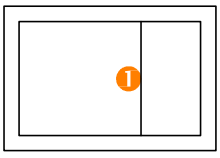
= 530 m² ✓

ANSWER 20

20.1

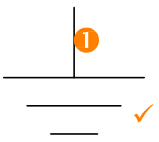
OUTER RECTANGLE ✓

INNER RECTANGLE 1



1 FREEHAND FOR BOTH

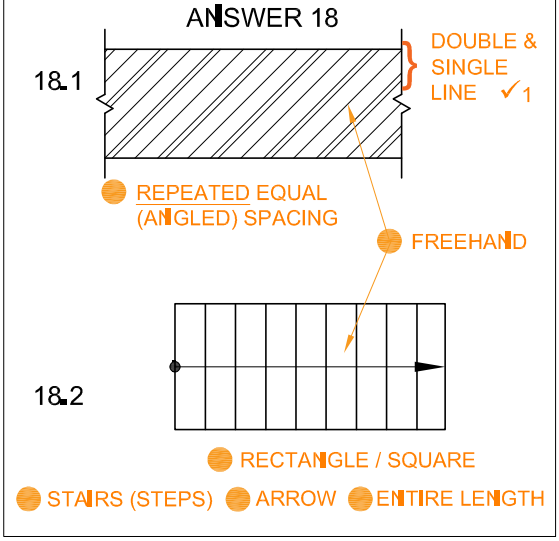
20.2



PAPER 1 QUESTION 1
GRADE 12
2023
MARKING GUIDELINES

ANSWERS		
1	PROJECT NUMBER	1
2	MR N KEENAN	1
3	SITE PLAN	1
4	PRINTING	1
5	LISA B	1
6	15000	1
7	ARCHITECT and CLIENT / MR N KEENAN	2
8	2	1
9	RAINWATER DOWN-PIPE	1
10	E / SOUTH / TOP LEFT	1
11	4,57	1
12	NEW ✓ IRON / STEEL ✓	2
13	NORTH POINT	1
14	SWING / OPENING OF THE GATES	1
15	WATT METER / ELECTRICAL METER	1
16	FALL / GRADIENT / SLOPE / DROP	1
17	SOUTH WEST / SW	2
18	*See below*	4
19		3
20		3
	TOTAL	**30**

ANSWER 18



ANSWER 19

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

P = AB + BC + CD + DE

= AB + BC + CD + DE (– GATE)
= (24,23 + 8,37 + 18,38 + 31,2) – 3,6
= 78,58 ✓ ANSWER IN METRES ✓

ANSWER 20

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

A = L x B

= (10,8 x 6) + (13,2 x 6) + (6,7 x 6,7)
= 64,8 + 79,2 + 44,89
= 188,89 ✓ m^2

ANSWER IN SQUARE METRES AND m^2 SHOWN ✓

PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2022
MARKING GUIDELINES

ANSWERS

1	884939	1
2	1 : 1300	1
3	PROJECT NUMBER	1
4	MULLER ARCHITECTS	1
5	DIRECTION OF OPENING	1
6	RODDING EYE	1
7	2000	1
8	BUILDING LINE	1
9	SEWERAGE LINE	1
10	MUST BE DEMOLISHED/REMOVED	1
11	BRICK PAVING	1
12	ELECTRICITY METER / WATT METER	1
13	PARKING FOR DISABLED PEOPLE	1
14	18,28	2
15	YELLOW	1
16	18	2
17	SOUTH EAST	2
18	*See below*	3
19		3
20		4
	TOTAL	**30**

ANSWER 18

Show ALL calculations.

APPLYING CORRECT FORMULA ✓

P = AB + BC + CD + DE + EF + FG + GA
= 117,7 + 13,7 + 115,1 + 8,3 + 88,3 + 39,7 + 102,8
= 485,6 ✓m ✓

ANSWER IN METRES

ANSWER 19

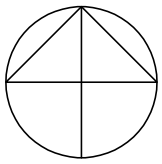
Show ALL calculations.

APPLYING CORRECT FORMULA ✓

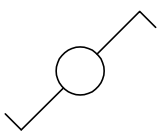
A = (15,4 x 24,5)+(39,1 x 48,0) +(6,0 x 27,9)
= 377,3 + 1876,8 + 167,4
= 2421,5 ✓m² ✓

ANSWER 20

20.1



20.2



20.1 NORTH POINT
CIRCLE 0,5
VERTICAL LINE 0,5
HORIZONTAL LINE 0,5
ANGLED LINES 0,5

20.2 TWO-WAY SWITCH
CIRCLE 0,5
SWITCH ON ONE SIDE 0,5
SWITCH ON OTHER SIDE 0,5

20.1 + **20.2** IN FREEHAND 0,5

PAPER 1 QUESTION 1
GRADE 12
2022
MARKING GUIDELINES

ANSWERS		
1	JBV-500W	1
2	JOHN	1
3	2021-01-23	1
4	DUPLEX PRINTING	1
5	Ø 100	1
6	INSPECTION CHAMBER	1
7	DECIDUOUS	1
8	CONCRETE WALL	1
9	GATE **OPENING**	1
10	ADJACENT BUILDING/STRUCTURE/HOUSE	1
11	6	1
12	BROWN	1
13	CROSSES BUILDING LINE	2
14	1 : 40	1
15	13,2	2
16	B/TOP RIGHT/349,2	1
17	SOUTH EAST/SE	2
18	*See the title panel*	3
19		3
20		4
	TOTAL	**30**

ANSWER 18

APPLYING CORRECT FORMULA ✓

Perimeter = AB + BC + CE + EG + FG + FA

= 38,16 + 60 + 3,6 + 33,8 + 34,56 + 26,2

= 196, 32 ✓ CONVERTED TO METER ✓

ANSWER 19

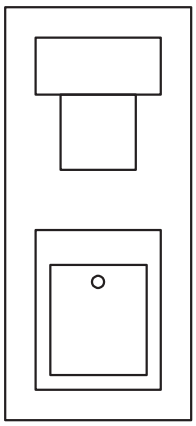
APPLYING CORRECT FORMULA ✓

Area = L x B

= (15,9 x 5,0) + (3,3 x 5,4) + (8 x 4,1)

= 130,12 ✓ m² ✓

ANSWER 20



FREEHAND 0.5

RECTANGLE (T) 1
SQUARE/
RECTANGLE (B) 1

RECTANGLE (B) 0.5
RECTANGLE (S) 0.5
HOLE 0.5

PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2021
MARKING GUIDELINE

ANSWERS		
1	DRAW/PREPARE SITE PLAN	1
2	INK-ON (PTY) LTD	1
3	2020-11-18	1
4	1 : 300	1
5	www.druloffarch.co.za	1
6	6000	1
7	STAPLE STREET	1
8	5	1
9	METRES (m) and MILLIMETRES (mm)	2
10	DASH LINE/HIDDEN DETAIL	1
11	INCLINE/UP	1
12	EARTH/LIGHTNING CONDUCTOR	1
13	STORMWATER DRAIN	1
14	MH	1
15	BLUE	1
16	SOUTH EAST	2
17	3 or 3 : 48	2
18	*See below*	3
19		4
20		3
TOTAL		**30**

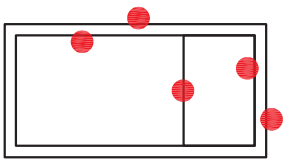
ANSWER 18
Show ALL calculations.
APPLYING CORRECT FORMULE ✓

= 24,77 + 48 + 20,77
+ 5, 65 + 44
= 143,19 ✓ m ✓

ANSWER 19
Show ALL calculations.
APPLYING CORRECT FORMULE ✓✓

= (6 x 6) + (10,5 x 12) + (8,75 x 4,5) +
(6 x 6)
= 237,38 ✓m^2 ✓

ANSWER 20



FREEHAND

PAPER 1 QUESTION 1
GRADE 12
2021
MARKING GUIDELINES

ANSWERS		
1	422-2019	1
2	(MR) A BOBANI	1
3	2019-09-21	1
4	2	1
5	2	1
6	10810	1
7	INSPECTION CHAMBER	1
8	1,8	1
9	RE	1
10	RED	1
11	BUILDING LINE / BL	1
12	EARTH / LIGHTNING CONDUCTOR	1
13	DRAIN FIELD	1
14	1 : 30	1
15	NORTH WEST	2
16	4	2
17	14,89	2
18	*See the title panel*	3
19		3
20		4
	TOTAL	**30**

ANSWER 18

✓ =FORMULA

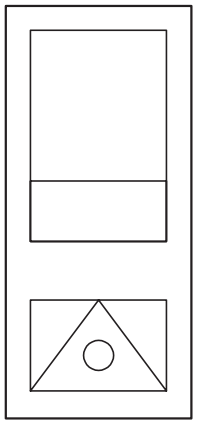
Perimeter = (59,50 + 23,45 + 61,15 + 37,5) - 3,5
= 178,1✓ m✓

ANSWER 19

✓ =FORMULA

Area = (10 x 6) + (5,55 x 8,14) + (2,5 x 3,75)
= 114,55✓m² ✓

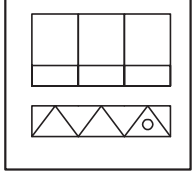
ANSWER 20



RECTANGLE 1
LINE 0.5
FREEHAND 0.5

RECTANGLE 1
TRIANGLE 0.5
HOLE 0.5

SANS 10143



PAPER 1 QUESTION 1
GRADE 12
SC/NSC 2020
MARKING GUIDELINE

ANSWERS		
1	CLARK	1
2	1818	1
3	KRYPTON PTY (LTD)	1
4	2018/12/20	1
5	VERIFY ALL DIMENSIONS AND LEVELS	1
6	GRAVEL	1
7	6 m	1
8	2044	1
9	BROWN	1
10	BUILD-IN CUPBOARD	1
11	TO BE REMOVED	1
12	NORTH	1
13	IE	1
14	SHRUBBERY	1
15	SEPTIC TANK and FRENCH DRAIN	2
16	SOUTH WEST	1
17	CLUBHOUSE, DECK, POOL	3
18	*See below*	3
19		3
20		4
	TOTAL	**30**

ANSWER 18

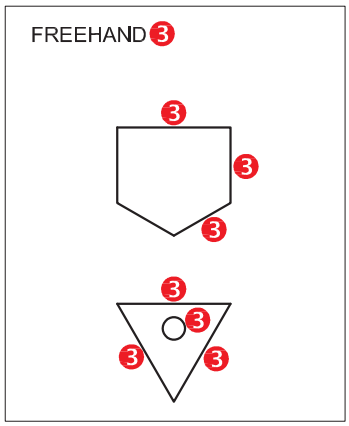
AB + BC + CD + DE + EF + FG + GA
= 16.06 + 7.05 + 23.36 + 26.41 + ✓
18.07 + 53.16 + 47.69
= 191.80 m ✓✓

ANSWER 19

AREA = (5 x 6) + (7 x 4) ✓
= 30 + 28
= 58m²
= 5.3 x 5.95
= 31.54m²
= 3 x 5
= 15m²

AREA = 58 + 31.54 + 15
= 104.54m² ✓✓

ANSWER 20



ANSWERS		
1	VANESSA	1
2	108	1
3	YG/-2018	1
4	6 m	1
5	1,2 m	1
6	3	1
7	4	1
8	2500	1
9	RED	1
10	INSPECTION CHAMBER	1
11	RIVER	1
12	CONCRETE WALL	1
13	GULLY	1
14	CONTOUR HEIGHT/HEIGHT ABOVE SEA LEVEL	1
15	WATT/ELECTRICAL METER	1
16	12 m	1
17	SOUTH-WEST	2
18	68 m (formula 1, answer 1, decimal correct 1)	3
19	700 m² (formula 1, answer 1, metre² 1)	3
20	*See below*	6
	TOTAL	**30**

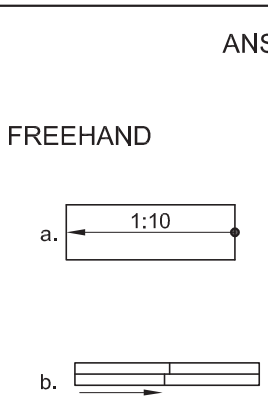
ANSWER 18
Show ALL calculations.

L+L+L+L+L+L ✓
=9+21+4+4+5+25
= 68 m ✓✓

ANSWER 19
Show ALL calculations.

(LxB) + ½(BxH) ✓
=(20x30) + ½(20x10)
=600 + 100
= 700 m² ✓✓

ANSWER 20



ANSWER 20
MARK ALLOCATION

FREEHAND	½
1. RAMP	
- DOT	½
- ARROW	½
- GRADIENT (1 : 10)	½
- DIRECTION	1
2. SLIDING DOOR	
- RECTANGLE	1
- MIDDLE LINE	½
- 2 OFFSET LINES	1
- ARROW	½
TOTAL	**6**

APPROVED

PAPER 1 QUESTION 1
GRADE 12
SC/NSC 2019
MARKING GUIDELINES

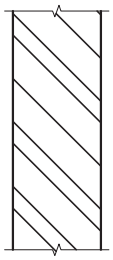
ANSWERS		
1	SITE PLAN	1
2	2018 - 04 - 05	1
3	1 : 500	1
4	FEROX STREET	1
5	3	1
6	8	1
7	RODDING EYE	1
8	2200	1
9	GATE SWING	1
10	ELECTRICAL METER/WATT METER	1
11	3	1
12	PALISADE	1
13	WALL/STRUCTURE/BUILDING	1
14	3290	2
15	MUST BE REMOVED	1
16	DIRECTION OF FLOW	1
17	1 : 40	1
18	GREEN	1
19	*See the title panel*	4
20	226,18 m (calculation 2, answer 1, metre 1)	4
21	315.05 m² (calculation 1, answer 1, metre² 1)	3
	TOTAL	30

ANSWER 19 FREEHAND $\frac{1}{2}$

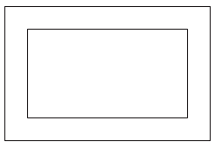
a)

FACE BRICK hatching
MARK ALLOCATION

- DOUBLE LINE	$\frac{1}{2}$
- SINGLE LINE	$\frac{1}{2}$
- SPACING	$\frac{1}{2}$
TOTAL	**1 $\frac{1}{2}$**



b)



GULLY MARK ALLOCATION

- LARGE RECTANGLE	1
- SMALL RECTANGLE	1
TOTAL	**2**

ANSWER 20

Perimeter = (22,5 + 9,85 + 26,69 + 65,05 + 49,19 + 74,9) - (12 + 10)
= 248,18 ✓ m - 22 m ✓
= 226,18 ✓ m ✓

ANSWER 21

Area = (7200 x 24100) + (11100 x 7200) + $\frac{1}{2}$(11100 x 11100) ✓
= 173,52 + 79.92 + 61.605
= 315,045 ✓ m² ✓

ANSWERS

1	1 : 1000	1
2	PREPARING THE SITE PLAN/DRAWING THE SITE PLAN	1
3	SUB 8 OF LOT 204	1
4	ONE	1
5	INSPECTION CHAMBER	1
6	15	1
7	2,3 m HIGH STEEL PALISADE FENCE	1
8	COBBLE STONES	1
9	SEPTIC TANK	1
10	SCHOOL STREET	1
11	BUILDING LINE	1
12	EDGE / BOUNDARY OF THE SPORTS FIELD	1
13	PAVEMENT	1
14	CORNER HEIGHT / HEIGHT ABOVE SEA LEVEL	1
15	EAST	2
16	105,651 m	2
17	NOT WITHIN THE BUILDING LINE	2
18	140 m (calculation 1, answer 1, metre 1)	3
19	872,5 m² (calculation 1, answer 1, metre² 1)	3
20	*See below*	4
	TOTAL	**30**

ANSWER 18: Show ALL calculations.

Perimeter = 40+6+5+13+5+6+35+12,5+5+12,5 ✓

= 140 ✓ m ✓

ANSWER 19: Show ALL calculations.

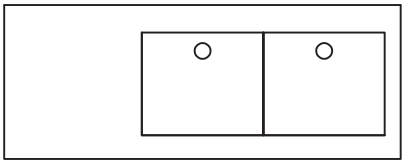
AREA OF RECTANGLE = 40 x 25
= 1000 m²

AREA 1 + AREA 2 = (13 x 5) + (12,5 x 5)
= 65 + 62.5
= 127.5 m²

TOTAL AREA OF THE SPORT CENTRE = 1000 - 127.5 ✓

= 872,5 ✓ m² ✓

ANSWER 20



DOUBLE SINK MARK ALLOCATION

- LARGE RECTANGLE	1
- SMALL RECTANGLE	1
- DIVIDING LINE	$\frac{1}{2}$
- TWO DRAINAGE HOLES	1
- FREEHAND	$\frac{1}{2}$
	4

	ANSWERS	
1	LUKE	1
2	STAND 7392	1
3	8789	1
4	30 m	1
5	1,2 m	1
6	2	1
7	INSPECTION EYE	1
8	8	1
9	50 m	1
10	140 l^3 / CUBIC LITRE	2
11	ORANGE RIVER	1
12	SECURITY FENCE	1
13	(50 YEAR) FLOOD LINE	1
14	NORTH POINT	1
15	BROWN	1
16	SOUTH EAST	2
17	6,2 m	2
18	735,23 m (calculation 1, answer 1, metre 1)	3
19	1991,25 m^2 (calculation 1, answer 1, $metre^2$ 1)	3
20	*See below*	4

TOTAL: 30

ANSWER 18
Show ALL calculations.

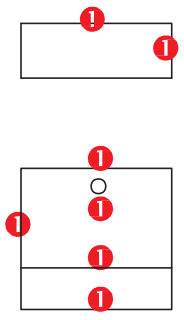
L+L+L+L
=143,560+223,910+143,890+223,870
= 735.23 m

ANSWER 19
Show ALL calculations.

(LxB)+(LxB)+(LxB)
=(19,5x28,5)+(21x24)+(27x34,5)
= 1991,25 m^2

20

FREEHAND 1



	ANSWERS	
1	SITE PLAN	1
2	YURI ARCHITECTS	1
3	VGY/-2017	1
4	6 m	1
5	ASPHALT	1
6	4	1
7	NATURAL FEATURES	1
8	47 m	1
9	1 : 20	1
10	PLACE OF WORSHIP	1
11	100 YEAR FLOOD LINE	1
12	HEIGHT ABOVE SEA LEVEL	2
13	2000 mm	1
14	BUILDING TO BE REMOVED	1
15	SEPTIC TANK	1
16	WEST ELEVATION	2
17	106 m	2
18	112 m (calculation 1, answer 1, metre 1)	3
19	14725 m² (calculation 1, answer 1, metre² 1)	3
20		4

TOTAL: 30

ANSWER 18
Show ALL calculations.

P = 16+20+4+16+12+20+8+16
= 112 m

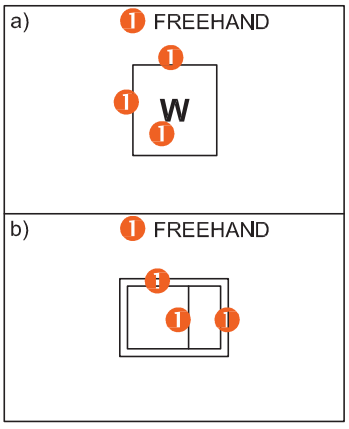
ANSWER 19
Show ALL calculations.

AREA OF RECTANGLE = 100 x 134,500
= 13450 m²

AREA OF TRIANGLE = $\frac{1}{2}$100 x (25)
= 1275 m²

TOTAL AREA OF SITE = 13450 + 1275
= 14725 m²

ANSWER 20



ANSWERS		
1	2015-10-12	1
2	J VAN WYK	1
3	NONE	1
4	50967	1
5	1 : 450	1
6	INSPECTION CHAMBER	1
7	RODDING EYE	1
8	MAN HOLE	1
9	5357	1
10	SLOPE OF SEWAGE LINE	1
11	ELECTRICAL METER/WATT METER/SUPPLY	1
12	RED	1
13	1 m	1
14	AGRICULTURAL LAND	1
15	EAST	2
16	30.4 m [calculation 1, answer 1, converted to metres 1]	3
17	1254.69 m² [calculation 2, answer 1, converted to metres 1]	4
18	*See below*	3
19		4
	TOTAL	**30**

ANSWER 16
Show ALL calculations

PERIMETER = S + S + S + S + S + S ✓1
= 8 + 4.8 + 5 + 2.4 + 3 + 7.2
= 30.4 m ✓1 ✓1

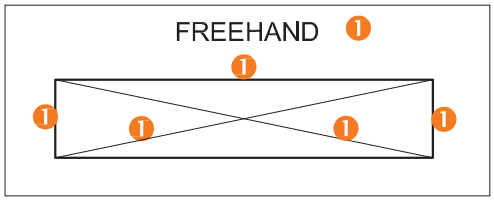
ANSWER 17
Show ALL calculations

Area of Δ = $\frac{1}{2}$ b x h ✓1
= $\frac{1}{2}$ (25.2) x (44.4)
= 559.44m²

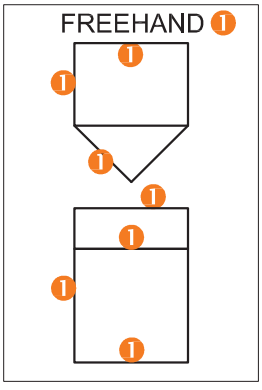
Area of rectangle = l x b ✓1
= 25.2 x 27.6
= 695.52m²

Area of Stand 1932 = 559.44 + 695.52
= 1254.96m² ✓1 ✓1

ANSWER 18



ANSWER 19



PAPER 1 QUESTION 1
GRADE 12
Feb.-Mar. 2017
MEMORANDUM

ANSWERS		
1	2	1
2	WILLIAM	1
3	1 : 800	1
4	VERNON	1
5	NAT PRINTERS	1
6	0 / NONE	1
7	2015-05-06	1
8	3	1
9	INSPECTION CHAMBER	1
10	BLACK	1
11	CONTOUR LINE	1
12	MILLIMETRE or mm	1
13	COMPACTED HARD CORE	1
14	ELECTRIC SECURITY FENCE	2
15	GATE OPENING DIRECTION	1
16	SERVITUDE	2
17	STOREROOM OVER BUILDING LINE	2
18	369,138 m [calculations 2, answer 1, metres 1]	3
19	2184 m² [calculations 2, answer 1, metres² 1]	4
20		3
	TOTAL	**30**

ANSWER 18
Show ALL calculations.

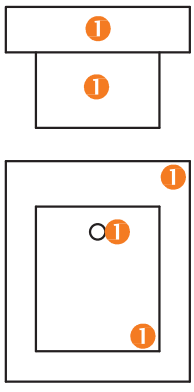
L = 2 (L + B)
= (2 x 74569) + (2 x 116000) ✓1
= 149,138 + 232,000
= 381,138

= 381,138 - GATE
= 381,138 - 12,000
= 369,138 m ✓1 ✓1

ANSWER 19
Show ALL calculations.

B A =9[(12,4 x 20) - (4 x 4)] + (12 x 8) ✓1 ✓1
=9(248 - 16) + 96
= 2088 + 96
= 2184 m² ✓1 ✓1

ANSWER 20
FREEHAND 1



PAPER 1 QUESTION 1
GRADE 12
NOVEMBER 2016
MEMORANDUM

	ANSWERS	
1	2	1
2	031 5836092	1
3	REPLACE FUEL TANKS	1
4	5 500	1
5	IBR	1
6	4	1
7	3	1
8	DEMOLISH/REMOVE	1
9	RAMP	1
10	BLUE	1
11	NO COLOUR	1
12	GULLEY	1
13	ADJACENT BUILDING/STRUCTURE	1
14	EAST	2
15	SPEED UP DRAWING PROCESS/ STANDARDISATION OF PRESENTATION	2
16	SCALE	1
17	271,3 m	2
18	82,28 m [calculation 1, answer 1, converted to metres 1]	3
19	318,2179 m² [calculation 1, answer 1, metres² 1]	3
20	*See below*	4

TOTAL: 30

ANSWER 18
Show ALL calculations.

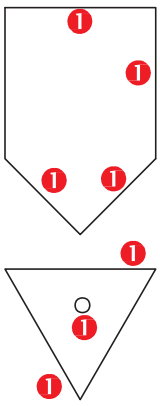
20,57 + 6,545 + 7,48 + 6,545 + 28,05 + 13,09 = 82,28 m

ANSWER 19
Show ALL calculations.

(20,57 x 13,09) + (6,545 x 7,48)
269,2613 + 48,9566
318,2179 m²

20

FREEHAND 1



	ANSWERS	
1	AFSP-2015	1
2	2	1
3	1	1
4	MRS SCHUTTE	1
5	2015-02-13	1
6	2	1
7	INSPECTION CHAMBER	1
8	DIRECTION OF FLOW	1
9	TREE	1
10	RED	1
11	CONTOUR LINE	1
12	DEMOLISH/REMOVE	1
13	30,25 m	1
14	4 700 mm	1
15	3 m	2
16	SOUTH-WEST	2
17	ELECTRICAL SUBSTATION	2
18	72 m [calculation 1, answer 1, converted to metres 1]	3
19	248m² [calculation 1, answer 1, metres² 1]	3
20	*See below*	4

TOTAL 30

ANSWER 18
Show ALL calculations.

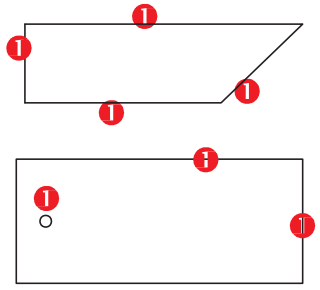
13 + 6 + 6 + 6 + 3 + 8 + 10 + 20 = 72 m

ANSWER 19
Show ALL calculations.

13 x 6	= 78
6 x 7	= 42
10 x 8	= 80
8 x 6	= 48
	248 m²

20

FREEHAND 1



	ANSWERS	
1	1VG2014	1
2	INCLUDE A SOAK PIT	1
3	1 : 300	1
4	2	1
5	BRICK PAVING	1
6	DWELLING	1
7	BLACK	1
8	GREEN	1
9	2000 / 2 m	1
10	WIRE FENCE	1
11	CORNER HEIGHT/HEIGHT ABOVE SEA LEVEL	1
12	BUILDING LINE	1
13	ELECTRICAL METER	1
14	NORTH POINT	1
15	NORTH-WEST	2
16	8,378	2
17	37,8	2
18	44 m [calculation 1, answer 1, converted to metres 1]	3
19	789,7 m² [calculation 1, answer 1, metres² 1]	3
20	*(See below)*	4

TOTAL: 30

ANSWER 18
Show ALL calculations.

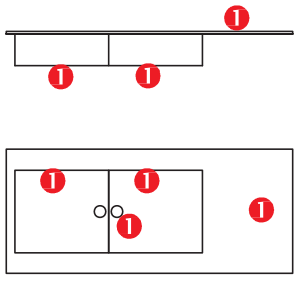
15+3.5+3.1+8.8+3.5+3.1+3.5 = 44 m

ANSWER 19
Show ALL calculations.

37,8 - (5+3) = 29,8
30 - (0,5+3) = 26,5
29,8 x 26,5 = 789,7 m²

20

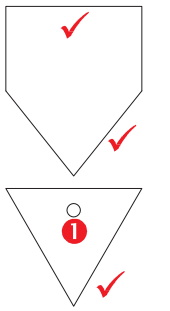
FREEHAND 1



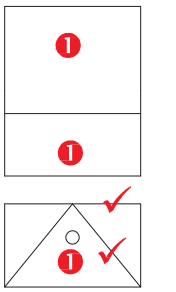
	ANSWERS	
1	2014-08-05	1
2	VERIFY DIMENSIONS AND LEVELS	1
3	1 : 500	1
4	CHANGE ROAD	1
5	TAR	1
6	CONFERENCE CENTRE	1
7	YELLOW	1
8	BLUE	1
9	HEIGHT ABOVE SEA LEVEL/CORNER HEIGHT	1
10	MAN HOLE	1
11	BOUNDARY LINE	1
12	PAVEMENT	1
13	CONTROL POINT/GUARD HOUSE	1
14	COMPACTED HARD CORE	1
15	RIDGE ROAD	2
16	24	2
17	75,128	2
18	129,6 [calculation 1, answer 1, converted to metres 1]	3
19	865,67 m² [calculation 1, answer 1, metres² 1]	3
20	*(See below)*	4

TOTAL: 30

20 FREEHAND 1



20 FREEHAND 1

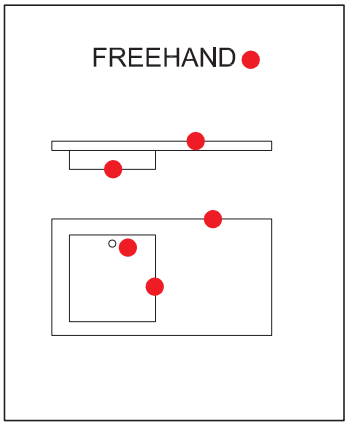


ALTERNATIVE ANSWER

ANSWERS

1	01-10-2005	1
2	CHECKING THE DRAWING	1
3	3 M	1
4	Dr AL SATION	1
5	6	1
6	4	1
7	STAND 34	1
8	RED	1
9	BROWN	1
10	DIRECTION OF FLOW	1
11	BOUNDARY LINE	1
12	REMOVE / DEMOLISH	1
13	ADJACENT BUILDING	1
14	DEMOLISH	1
15	4 m	1
16	15,97 m	2
17	NORTH WEST ELEVATION	2
18	102,8 m [calculation 1, answer 2, metre 1]	4
19	354,51 m² [calculation 1, answer 2, metre² 1]	4
20	(See below.)	3

TOTAL: 30

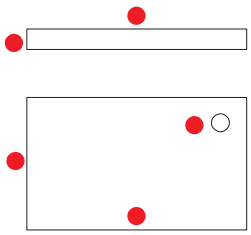


ANSWERS		
1	14-02-2014	1
2	P XABA	1
3	1 : 200	1
4	2014-001	1
5	BUDGET DRAUGHTING	1
6	4	1
7	1 : 30	1
8	2,25 m	1
9	GATE	1
10	GULLEY	1
11	UP	1
12	RETAINING WALL	1
13	TREE	1
14	SOUTH WESTERN	1
15	47,5 m	2
16	5 m x 12,5 m	2
17	156 m² [calculation 1, answer 1, metre² 1]	3
18	245 m [calculation 1, answer 1, metre 1]	3
19	12,4 m [calculation 1, answer 1, metre 1]	3
20	(See below.)	3

TOTAL: 30

20

FREEHAND



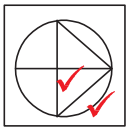
ANSWERS

1	2	1
2	2	1
3	114	1
4	3,5 m	1
5	MANHOLE	1
6	2,4 m	1
7	ADJACENT BUILDING/STRUCTURE	1
8	OUTBUILDING TO BE DEMOLISHED	1
9	DRIVEWAY	1
10	BOUNDARY LINE LENGTH	1
11	BUILDING LINE	1
12	7521	1
13	ES7245	1
14	AVOCADO	1
15	MILLIMETRES or mm	1
16	HIGHER	2
17	3,5 m	2
18	*(See below.)*	4
19	*(See below.)*	4
20	52 m [calculation 1, answer 1, metres 1]	3

TOTAL: 30

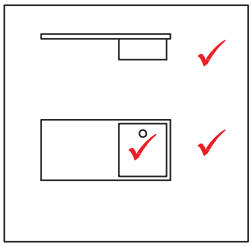
18

DIRECTION ✓
FREEHAND ✓



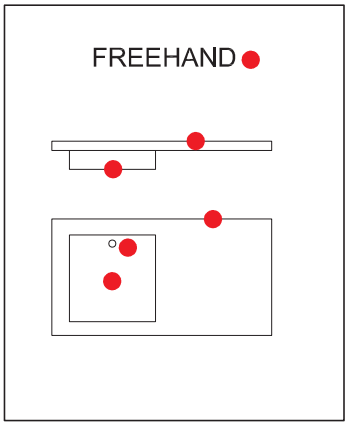
19

FREEHAND ✓



ANSWERS		
1	12-12-201	1
2	THANDI	1
3	2	1
4	4 m / 4000	1
5	1 : 40	1
6	2,2 m or 2200	1
7	RED	1
8	2,75 m or 2750	1
9	SERVITUDE	1
10	GATE SWING	1
11	BUILDING LINE	1
12	DIMENSION	1
13	BOUNDARY LINE	1
14	WEST	2
15	C	2
16	3,48 m or 3480	2
17	THE TREE OVER THE SEWERAGE LINE	2
18	69,6 m [calculation 1, answer 1, metre 1]	3
19	167,04 m² [calculation 1, answer 1, metre² 1]	3
20		3

TOTAL: 30

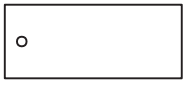


ANSWERS		
1	DESIGN FOR LIVING ARCHITECTS	1
2	LEBO	1
3	18/10/2012	1
4	DBE-2012-01	1
5	VERIFY DIMENSIONS AND CHECK LEVELS	1
6	1,8 m or 1 800 mm	1
7	1	1
8	16	1
9	UP (STEP)	1
10	SEPTIC TANK	1
11	SEWERAGE PIPE/LINE	1
12	ASPHALT	1
13	GATE OPENING DIRECTION	2
14	(FUTURE) RECREATIONAL DEVELOPMENT	2
15	128,55 m	2
16	INSPECTION EYE	1
17	21 880 mm	2
18	437,853 m [calculation 1, answer 1, metre 1]	3
19	1 214 m² [calculation 1, answer 1, metre² 1]	3
20	*(See below.)*	3

TOTAL: 30

20 FREEHAND ✓

 ✓



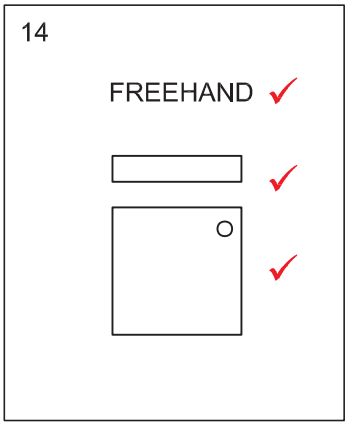
✓

ANSWERS

1	FOUNDATION	6		10
	DAMP-PROOF COURSE	9		
	GROUND LEVEL	7		
	INTERNAL WALL	1		
	CONCRETE SLAB	3		
	COMPACTED HARDCORE	4		
	UNDISTURBED EARTH	5		
	SCREED	2		
	PLASTER	10		
	FINISHED FLOOR LEVEL	8		
2	Q1P1-SUP-2012			1
3	ZAPPY PRINTERS			1
4	5 m or 5000 mm			1
5	STRELITZIA ROAD			1
6	HEIGHT			1
7	INDIGENOUS TREES			1
8	ROAD/DRIVEWAY			1
9	SEPTIC TANK			1
10	PARKING			1
11	6			1
12	COBBLE STONES			1
13	469 m [calculation 1, answer 1, metres 1]			3
14				3
15	106 m² [calculation 1, answer 1, metres² 1]			3

TOTAL: 30

14



ANSWERS

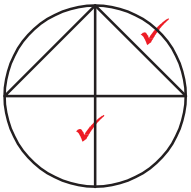
1	7	1
	2	1
	10	1
	4	1
	9	1
	3	1
	1	1
	6	1
	8	1
	5	1
2	2/08	1
3	ROCKY ROAD	1
4	SEWER LINE	1
5	ROAD	1
6	UNIT/BUILDING/SUITE/CONSULTING ROOM 9	1
7	BRICK PAVING/WALKWAY	1
8	BUILDING LINE	1
9	4	1
10	10	1
11	A (1558,2)	2
12	456,6 m [calculation 1, answer 1, metres 1]	3
13	12916,8 m² [calculation 1, answer 1, metres² 1]	3
14		3

TOTAL: 30

14

FREEHAND ✓

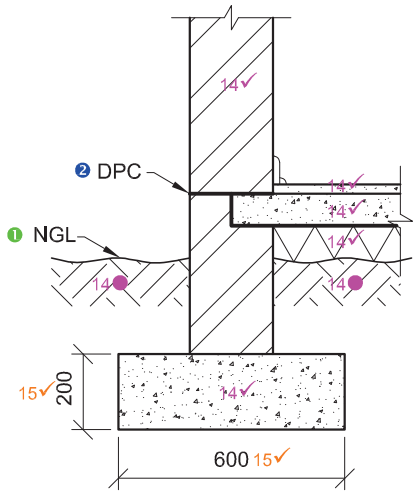
CIRCLE 1
ARROW 1



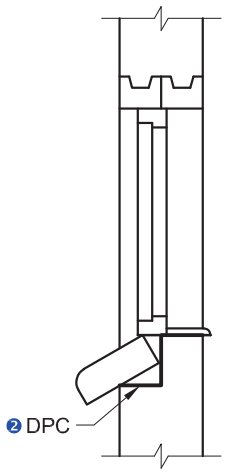
ANSWERS		
1	THE OUTBUILDING IS OUTSIDE THE BUILDING LINE **OR** THE OUTBUILDING ROOF IS OVER THE BOUNDARY LINE.	2
2	79	1
3	1	1
4	SCALE 1 : 200	1
5	12-04-2010	1
6	KAYSERS BEACH	1
7	MARLIN DRIVE	1
8	2	1
9	14	1
10	INSPECTION EYE	1
11	MANHOLE	1
12	BUILDING LINE	1
13	MUNICIPAL SEWER LINE	1
14	CONTOUR LINE	1
15	ROOF OVERHANG	1
16	BOUNDARY LINE	1
17	ISLAND IN THE ROAD	1
18	0.5 m	1
19	SOUTH	1
20	37.806 + 24.200 + 10.615 + 30.300 + 31.706 ✓ = **134.627** ✓m✓	$2\frac{1}{2}$
21	37.806 x 31.706 = 1198.67704 ✓ 37.806 - 30.3 = 7.506 ✓ 7.506 x 7.506 = 56.340036 ✓ 56.340036 / 2 = 28.170018 ✓ 1198.67704 - 28.170018 ✓ = **1170.5** ✓**m²** ✓	$4\frac{1}{2}$

TOTAL: 27

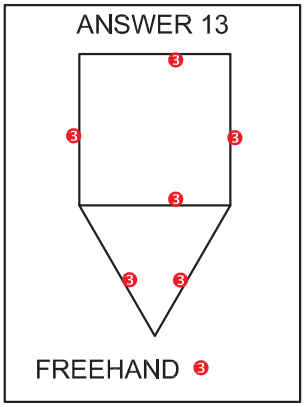
ANSWERS 1, 2, 14 & 15



ANSWER 2



ANSWER 13



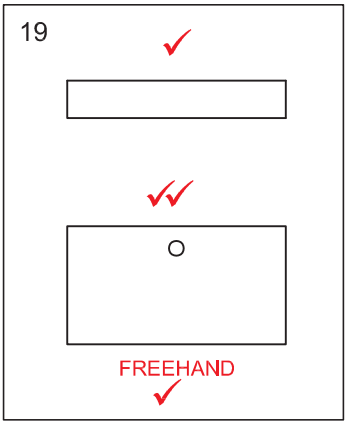
ANSWERS

1		$\frac{1}{2}$
2		1
3	A. RAFTER	1
	B. GANG NAIL/TRUSS PLATE/NAIL PLATE	1
	C. TIE BEAM	1
	D. WALL PLATE	1
4	TILES	1
5	LINTEL/BEAM	1
6	TO CARRY/SUPPORT THE WEIGHT ABOVE THE WINDOW.	1
7	TO INDICATE THAT THE WALL IS CONTINUING	1
8	CAVITY WALL	1
9	FOR DISABLED PEOPLE	1
10	3	1
11	ND6/6 & ND9/12	2
12	5.766 x 5.036 = 29.0376 m² 1 2.124 x 2.124 = 4.5114 m² 1 4.5114 / 2 = 2.2557 m² 1 29.0376 - 2.2557 1 = 26.7819 ✓ m²✓	4
13		$3\frac{1}{2}$
14		6
15		2

TOTAL: 30

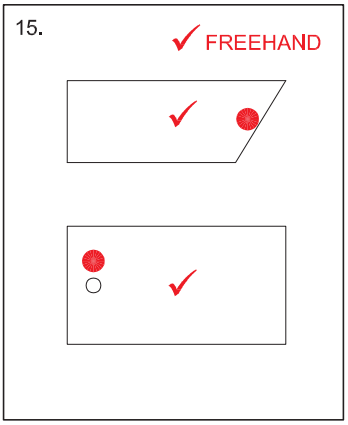
ANSWERS		
1	GOVENDER & SONS	1
2	1:200	1
3	Q1P1-S-2010	1
4	CRAIG	1
5	0	1
6	ADJACENT BUILDING	1
7	CONTOUR	1
8	GATE SWING	1
9	BUILDING LINE	1
10	MUST BE DEMOLISHED	1
11	24 VALLEY VIEW ROAD	1
12	73	2
13	4500	2
14	1,7 m	2
15	GREEN	2
16	RED	1
17	368,29 m^2	3
18	33,9%	3
19		4

TOTAL: 30



ANSWERS		
1	6	1
2	ISLAND IN KITCHEN	1
3	2009-351	1
4	P MSOMI	1
5	1:100	1
6	GUTTER	1
7	FFL/FINISHED FLOOR LEVEL	1
8	NGL/GL	1
9	BUILT-IN CUPBOARD	1
10	WC	1
11	NORTH POINT	1
12	FLOOR PLAN	1
13	SOUTH ELEVATION	1
14	C; B; A; F; H	5
15		4
16	18°	1
17	BLACK	1
18	41,2	3
19	82,64 m²	3

TOTAL: 30



ANSWERS		
1	2	1
2	ERF 9	1
3	1:250	1
4	19-02-2008	1
5	PAVING	1
6	6TH AVENUE	1
7	GREEN BELT	1
8	2500m	1
9	5	1
10	CORNER HEIGHT	1
11	BOUNDARY LINE	1
12	PROPOSED NEW OUT-BUILDING	1
13	SEWER LINE	1
14	MAN HOLE	1
15	NORTH POINT	1
16	2m	2
17	56,607	2
18	NORTHWESTERN ELEVATION	2
19	117, 607 m	3
20	889,875 m²	3

TOTAL 27

ANSWERS		
1	SITE PLAN	½
2	99	½
3	1:200	½
4	25-09-2008	½
5	31,25 m	1
6	mm	1
7	EAST LONDON	1
8	5000	1
9	4	1
10	BUILDING LINE	1
11	TREE	1
12	SEWERAGE	1
13	EXISTING DWELLING	1
14	BOUNDARY LINE	1
15	CONTOUR LINE	1
16	3 m	2
17	BECAUSE OF THE PROTECTED TREE	2
18	NORTH EAST	2
19	120,83 m	3
20	886,72 m²	3

TOTAL 25

ANSWERS		
1	1:200	1
2	TSHEDZA STREET	1
3	58	1
4	OPEN LAND / NOTHING	2
5	RED	1
6	56	1
7	15	1
8	INSPECTION EYE	1
9	RODDING EYE	1
10	BUILDING LINE	1
11	CONTOUR LINE	1
12	MAN HOLE	1
13	SEWERAGE LINE (DRAIN LINE)	1
14	ENTRANCE	1
15	NORTH POINT	1
16	13 METRES	2
17	4 METRES	2
18	EAST	1
19	18 METRES / 18000mm	2
20	750m²	2

TOTAL 25