



**higher education  
& training**

Department:  
Higher Education and Training  
**REPUBLIC OF SOUTH AFRICA**

**GENERAL EDUCATION AND TRAINING CERTIFICATE**

**NQF LEVEL 1**

**AET LEVEL 4 SITE-BASED ASSESSMENT**

**LEARNING AREA : MATHEMATICS AND  
MATHEMATICAL SCIENCES**

**CODE : MMSC4**

**TOOL : ASSIGNMENT**

**DURATION : TWO WEEKS**

**MARKS : 50**

**This assessment tool consists of 4 pages.**

## INSTRUCTIONS AND INFORMATION FOR THE TEACHER

1. This assignment is based on unit standard ID7452 and ID 7464 and can given while the units standard title is taught

### QUESTION 1

1.1	1.1.1	60km✓A	Correct answer	(1)
	1.1.2	S(75;45)✓✓A	Correct points	(2)
	1.1.3	Between point B to C✓A	Correct points	(1)
	1.1.4	Percy was stationery for: 400 min – 100min = 300 minutes✓A  In $h = \frac{300min}{60min} \checkmark A$ $h = 5h \checkmark A$ $\therefore$ Percy was stationery/not cycling for 5 hours	300min 1 mark for 5h	(3)
	1.1.5	Converting 100 minutes to hours = $\frac{100}{60}$ $= 1,67h \checkmark A$ $s = \frac{d}{t}$ $s = \frac{60 km}{1,67h} \checkmark A$ $s = 36km/h \checkmark A$	Correct conversion of minutes to hours  Correct substitution  Correct answer with units	(3)
	1.1.6	Total minutes 650minutes✓A 600min = 10hours 600min + 50 min = 10:50✓A 06:00 + 10:50✓A 16:50✓A He will arrive at 16:50 OR  $\frac{650min}{60min} = 10,83hours \checkmark A$ 600min = 10 hours✓A 49,8min $\approx$ 0,83hours✓A $\therefore$ He will arrive at 16:50✓A	Correct total of time 650 minutes 1 mark for 10:50 2 marks for correct answer Accept words Ten minutes to five o'clock	(4)

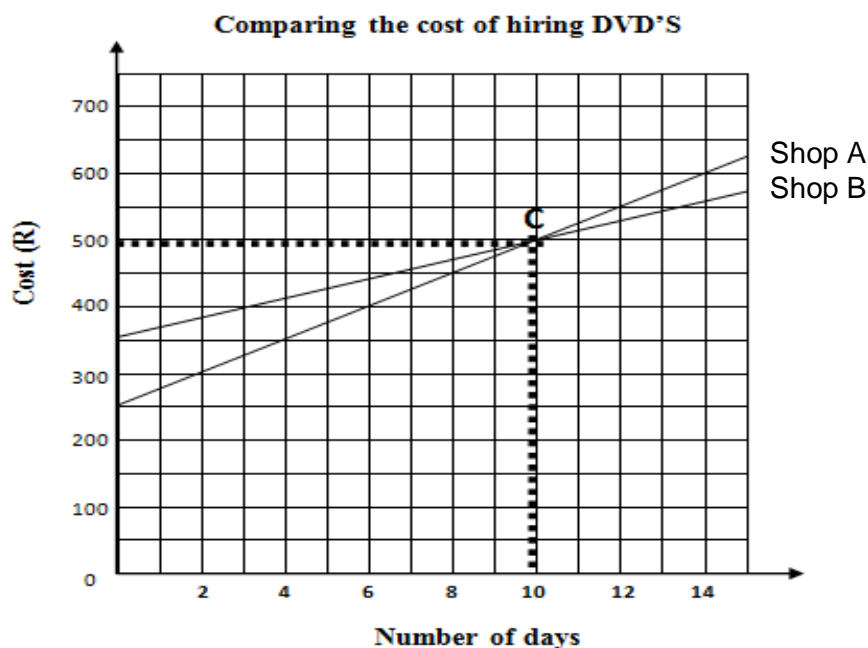
	1.1.7	$t = \frac{d}{s}$ $t = \frac{60km}{100km/h} \checkmark A$ $t = 0,6h \checkmark A$ In minutes= $0,6 \times 60 \checkmark A$ $\therefore t = 36min \checkmark A$	Correct substitution  Correct answer Correct conversion to minutes	(4) [18]
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## QUESTION 2

2.1	2.1.1	Shop A: Cost= R250 + 25 × number of days OR $C = R250 + 25n. \checkmark A \checkmark A$ Shop B: Cost= R350 + 15 × number of days OR $C = R350 + 15n. \checkmark A \checkmark A$	Correct formula  Correct formula	(4)
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	2.1.2							For 400 and 450	(4)	
		Days	0	2	6	8	10	14		For 500 and 600
		Shop A	250	300	400✓A	450✓A	500✓A	600✓A		For 440 and 470
		Shop B	350	380	440✓A	470✓A	500✓A	560✓A		For 500 and 560

2.1.3



✓A for labelling Shop A; ✓A for labelling Shop B

✓A for plotting points for Shop A; ✓A for plotting points for Shop B

✓A for labelling axes

(5)

	2.1.4	See Letter C✓A on the graph and dotted line✓A	Correct indication of the letter C on the graph and Dotted line	(2)
	2.1.5	(10✓A; 500✓A)	Correct co-ordinates	(2)
	2.1.6	Shop B✓A, because hiring DVD for 14 days in shop B is cheaper than shop A✓A	Correct Relevant motivation	(2) [18]

### QUESTION 3

3.1	3.1.1	Parallelogram✓A	Correct answer	(1)
	3.1.2	$N(-5; 5)$ ✓A $O(-3; 5)$ ✓A $P(-1; 1)$ ✓A $Q(-3; 1)$ ✓A	Each correct each co-ordinate	(4)
	3.1.3	$NOPQ$ is a reflection or is flipped over $x$ – axis to form $N'O'P'Q'$ ✓A✓A	for reflection or flipped for $x$ –axis	(2)
	3.1.4		Shape All four points in the right co-ordinates	(2)
	3.1.5	Note: $N''Q'' = O''P''$ $\therefore NQ^2 = 2^2 + 4^2$ (Pythagoras) ✓A $\therefore NQ = \sqrt{20} = 4,472$ ✓A Perimeter = $2 + 4,472 + 2 + 4,472$ ✓A $= 12,944$ ✓A	Pythagoras Value of a NQ/OP Correct addition Correct answer	(4) [13]

**TOTAL: 50**