



### Non Calculator Paper (25 marks)

No.	Answers	Marks	Total
1	a) 21,25 b) 16,32	B1 both correct B1 both correct	2
2	a) 59 b) -2 c) 120	B1 B1 B1	3
3	Square underlined Hexagon underlined	B1 B1	2
4	a) Division by 2 seen or implied Mary pays €18.25 b) Total = €14 + €18.25 = €32.25	M1 A1 M1 A1	4
5	a) €1.04, €0.63 or 63c Total Cost = €1.67 b) Change = €5 - €1.67 = €3.33	M1 A1 M1 A1 f.t.	4
6	a) 20% of €40 = €8 b) 10% of 15 m = 1.5 m	M1 A1 M1 A1	4
7	a) Any correct division b) 50 cm <sup>2</sup> or 36 cm <sup>2</sup> c) 16 cm <sup>2</sup> or 30 cm <sup>2</sup> d) 66 cm <sup>2</sup>	B1 B1 B1 B1	4
8	Equal sides seen or implied Length = 4 cm	M1 A1	2

## Main Paper (75 marks)

No.	Answers	Marks	Total
1	a) 512 b) 512.1 c) 500	B1 B1 B1	3
2	a) $\frac{1}{3}$ b) $\frac{6}{8}, \frac{3}{4}$ c) (i) Correct common denominator Correct addition, $\frac{9}{10}$ (ii) Correct common denominator Correct subtraction, $\frac{1}{9}$	B1 B1 B1 M1 M1 A1 M1 M1 A1	9
3	a) Grouping and simplifying $= b + 2$ b) Removing brackets $= 30a - 35$	M1 A1 M1 A1	4
4	Correct patterns Correct patterns	B1 B1 B1 B1	4
5	2 D 2 D 3 D	B1 B1 B1	3
6	a) 1 h 20 min b) 9:50 c) $\frac{1}{8}$	B1 M1 A1 B1	4
7	$180^\circ$ seen or implied $p = 180 - (60 + 45) = 75$ $360^\circ$ seen or implied $q = 360 - (70 + 75 + 93) = 122$	M1 M1 A1 M1 M1 A1	6

8	<p>a) Large arc seen</p> <p>Intersecting arcs drawn</p> <p>Line BX drawn</p> <p>b) Angle <math>XBC = 21^\circ \pm 2^\circ</math></p>	<p>B1</p> <p>B1</p> <p>B1</p> <p>B2</p>	5
9	<p>a) (2,4)</p> <p>b) Correct plotting of points B, C and D</p> <p>c) Correct joining of points</p> <p>d) Rectangle</p> <p>e) Correct diagonal AC</p> <p>f) <math>AB = 14</math>, <math>BC = 6</math> seen or implied</p> <p>Area = <math>\frac{1}{2} \times 14 \times 6 = 42</math></p>	<p>B1</p> <p>B1 all correct</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1 both correct</p> <p>M1 A1</p>	8
10	<p>a) Finding total (434)</p> <p>Dividing by 7, mean = 62</p> <p>b) Putting numbers in order</p> <p>Median = 60</p>	<p>M1</p> <p>M1 A1</p> <p>M1</p> <p>A1</p>	5
11	<p>a) 12</p> <p>b) (i) <math>\frac{5}{12}</math></p> <p>(ii) <math>\frac{2}{12} = \frac{1}{6}</math></p> <p>(iii) <math>\frac{5}{12}</math></p> <p>(iv) 0</p>	<p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p> <p>B1</p>	5
12	<p>a) 50</p> <p>b) Labelling of vertical axis</p> <p>c) All bars are of correct height</p>	<p>B1</p> <p>B1</p> <p>B1 for every 2 correct bars</p>	5

13	<p>a) (i) 23, 20  (ii) 8, 24</p> <p>b) <math>2f = 8, f = 4</math></p> <p>c) Correct substitution  Simplifying brackets o.e.  = 33</p>	<p>B1 both correct  B1 B1  M1A1  M1  M1  A1</p>	8
14	<p><math>30 + 30 = 60</math> seen or implied  <math>30 + 30 + 30 = 90</math> seen or implied</p> <p><math>A = 65 - 60 = 5</math>  <math>B = 90 - 65 = 25</math></p>	<p>M1  M1  M1 A1  M1 A1</p>	6