Year 7 Summer Assessment NON CALC Mark Scheme

Question	Answer	Mark	Notes
1	102	1	cao
2	534	1	cao
3	61.09	1	cao
4	452.87	1	cao
5	0.03	1	cao
6	762	M1 A1	For a correct method shown with no more than one numerical error. cao
7	19.98	M2 (M1) 3	For digits 1998 seen For a correct method shown with no more than one numerical error. cao
8 (a) 8 (b)	890 0.56	1 1	cao cao
9 (a) 9 (b)	340 450	1 1	cao cao
10	10 and 25 or 2 and 25	B2 B1	cao For listing at least four factors of 50.
11	48	M1 M1 A1	Missing lengths 7 or 4 seen or 2×6 (=12) or 9x4(=36) or 2×10 (=20) or 7×4 (=28) (2×6) + (9×4) or (2×10) + (7×4) or (9×10) – (6×7) seen cao
12 (a) 12 (b)	$\frac{3}{4}$ Any fraction equivalent to $\frac{5}{8}$	1 1	cao cao
13 (a) 13 (b)	$\frac{2}{45}$ $\frac{12}{17}$	M1 A1 1	For common denominator seen with at least one fraction with numerator correct. oe oe
14	(should be) 1.25	1	Accepted answers are: 15 minutes is 0.25 15 minutes is ¼ (of an hour) 1.15 is 1 hour 9 mins 0.15 is 9 mins

<table>
<tr><td>15 (a)

15 (b)</td><td>$\frac{9}{200}$

0.875</td><td>B2
B1

1</td><td>cao
For $\frac{45}{1000}$ seen or any equivalent fraction

cao</td></tr>
<tr><td>16 (a)

16 (b)</td><td>-2, -1, 0, 1, 2

$2 < x \leq 6$</td><td>1

B2
B1</td><td>cao

cao
For either $2 <$ or ≤ 6 or $2 \leq x < 6$</td></tr>
<tr><td>17 (a)

17 (b)</td><td>74

70
Reason: angles in a triangle add to 180</td><td>1

1
1</td><td>Cao

Correct angle, or intention to take both angles away from 180
Correct reason</td></tr>
<tr><td>18</td><td>For correctly labelled pie chart using angles 96˚, 40˚, 144˚ and 80˚</td><td>M1
M1
A1</td><td>For 360 ÷ 180 = 2 or ×2 seen or one angle correct.
For at least two angles drawn within tolerance.
Accurately drawn pie chart with tolerance of (+/-) 2˚ for each angle.</td></tr>
<tr><td>19</td><td>16% 0.302 $\frac{1}{3}$ $\frac{2}{5}$</td><td>B2

B1</td><td>cao (condone values using equivalent forms)

For correctly converting at least two values to a different form.
If 1/3 converted, it must be correct to at least 2dp or better, or recurring implied.</td></tr>
<tr><td>20</td><td>9</td><td>M1
M1
A1</td><td>For $x - 3$ or $2x$ seen
For $x + x - 3 + 2x = 33$ or better
(Answer of 9 is awarded 3 marks) cao</td></tr>
<tr><td>21</td><td>$6x^2 - 15x$

$3y(2y + 5)$</td><td>1

B2

B1</td><td>cao

cao

for $y(6y + 15)$</td></tr>
<tr><td>22</td><td><table><tr><th></th><th>Equation</th><th>Expression</th><th>Formula</th></tr><tr><td>$2x + 9$</td><td></td><td>✓</td><td></td></tr><tr><td>$A = \pi \times r^2$</td><td></td><td></td><td>✓</td></tr><tr><td>$5x - 1 = 9$</td><td>✓</td><td></td><td></td></tr></table></td><td>B2

B1</td><td>cao

For 1 or 2 correct</td></tr>
<tr><td>23</td><td>3</td><td>M1
M1
A1</td><td>For second $2x$ seen on diagram or for 16 + 5
For $2x + 2x + 3x - 5 = 16$ or better
(Answer of 3 is awarded 3 marks) cao</td></tr>
</table>

Extension Questions

1	75	M1 M1 A1	For sight of 540 or (5 – 2) × 180 For [540] – 130 – 130 – 130 (= 150) Note: 540 can be any value greater than 390 cao
2	146	M1 M1 A1	98 × 5 (=490) or 114 × 7 (=798) For a complete method eg "798" – " 490" -162 146 cao
3	$\frac{17}{3}$	M1 M1 M1 A1	AB= $2x$ or DC= $2x+4$ or 38-4 $x + x + 2x + 2x + 4$ or 38 – 4 ÷ 6 6x + 4 = 38 $\frac{17}{3}$ oe