

PSLE Mathematics (Standard)

Answer Key

Paper 1

Booklet A (20 marks)

Questions 1 to 10: 1 mark each

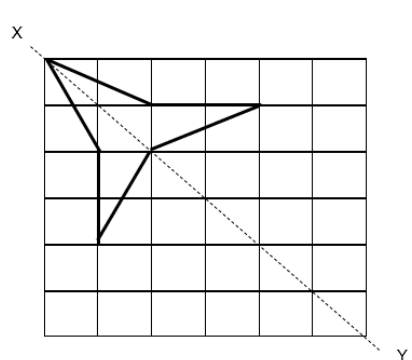
Questions 11 to 15: 2 marks each

1.	2	6.	4	11.	3
2.	2	7.	3	12.	3
3.	1	8.	3	13.	1
4.	3	9.	4	14.	4
5.	2	10.	1	15.	1

Booklet B

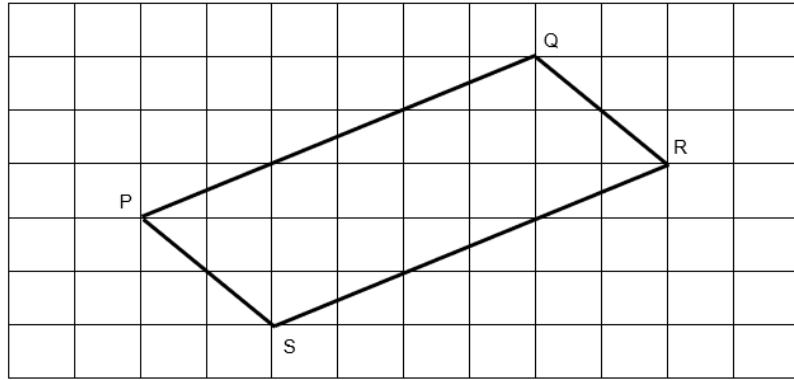
Question 16 to 20 : 1 mark each

Questions 21 to 30: 2 marks each

Question	Answer
16	17
17	25
18	0.375
19	62
20	
21	$32 \times 3 = 96$ [M1] $10 + 11 = 21$ $96 - 21 = 75$ [A1]
22	$6 - 4 = 2$ $(24 + 0) \div 2 = 12$ $12 \times 6 = 72$ [M1A1]

<p>23</p>	$\frac{2}{5} H = \frac{3}{4} T$ $H = \frac{15}{8} T$ <p>Total mass, $\frac{15}{8} T + T = \frac{23}{8} T$ [M1]</p> <p>Henry's mass = $\frac{15}{8} \div \frac{23}{8} = \frac{15}{23}$ [A1]</p> <p>Or</p> $\frac{2}{5} H = \frac{3}{4} T$ $\frac{2 \times 3}{5 \times 3} H = \frac{3 \times 2}{4 \times 2} T$ $\frac{6}{15} H = \frac{6}{8} T$ [M1] <p>Hence, $H = 15u, T = 8u$</p> $\frac{15}{15+8} = \frac{15}{23}$ [A1]																
<p>24</p>	<p>$4u = \\$52$ $1u = \\$13$ [M1] $5u = \\$65$ [A1]</p>																
<p>25</p>	<p>$320 \times 0.6 = 192$ $192 \times 0.25 = 48$ [M1A1]</p>																
<p>26</p>	<p>$3w + 3w + 8 = 80$ $6w = 72$ [M1] $w = 12$ $3w = 36$ [A1]</p>																
<p>27</p>	<table border="1"> <thead> <tr> <th>B</th> <th>G + R</th> <th>G</th> <th>R</th> </tr> </thead> <tbody> <tr> <td>2u (x7)</td> <td>3u (x7)</td> <td></td> <td></td> </tr> <tr> <td></td> <td>7p (x3)</td> <td>4p (x3)</td> <td>3p (x3)</td> </tr> <tr> <td>14b</td> <td>21b</td> <td>12b</td> <td>9b</td> </tr> </tbody> </table> <p>[M1]</p> <p>14:9 [A1]</p>	B	G + R	G	R	2u (x7)	3u (x7)				7p (x3)	4p (x3)	3p (x3)	14b	21b	12b	9b
B	G + R	G	R														
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14b	21b	12b	9b														
<p>28</p>	<p>$\frac{1}{2} \times 16 \times 16 = 128 \text{ cm}^2$ [M1A1]</p>																
<p>29</p>	<p>(a) True (b) Not possible to tell</p>																

30

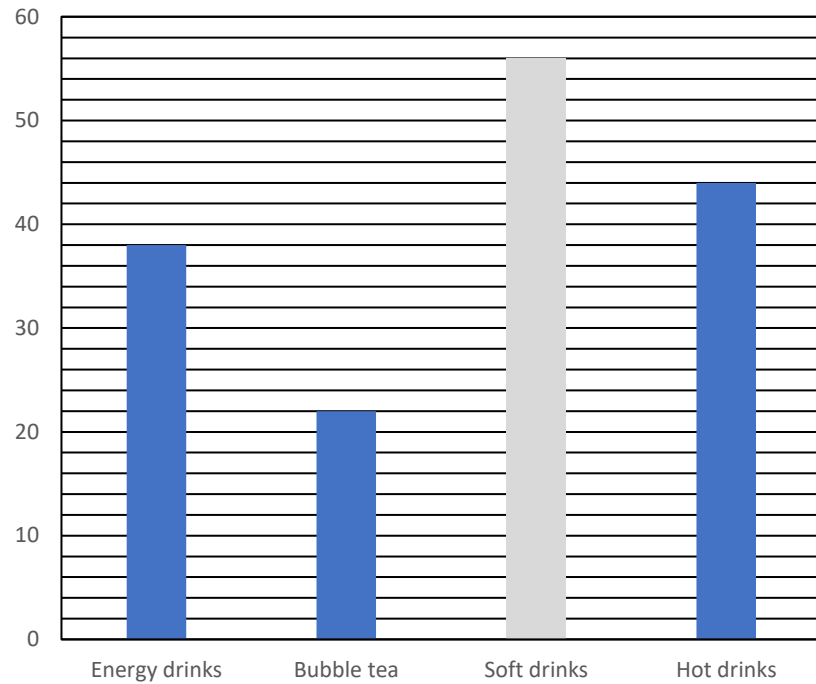


Paper 2

Questions 1 to 5 : 2 marks each

Question	Answer
1	$44 = 1 \times 44, 2 \times 22, 4 \times 11$ $88 = 1 \times 88, 2 \times 44, 4 \times 22, 8 \times 11$ Common factors are 1, 2, 4, 11, 22 and 44 [M1] 6 [A1]
2	$100\% - 15\% = 85\%$ Shaded area : Area of figure $15 : 85+15+85$ [M1] $15 : 185$ $3 : 37$ [A1]
3	$180^\circ - 25^\circ - 113^\circ = 42^\circ$ $180^\circ - 115^\circ = 65^\circ$ $180^\circ - 42^\circ - 65^\circ = 73^\circ$ [M1] 73° [A1]
4	$8 \times 3 = 24$ [M1] $24 \div 2 = 12$ $12 - 8 = 4$ [A1]
5	Fig 1: $1 \times 1 = 1$ Fig 2: $2 \times 2 = 4$ Fig 3: $3 \times 3 = 9$ Hence, Figure 13: $13 \times 13 = 169$ [M1A1]
6	$\frac{3}{3} - \frac{1}{3} = \frac{2}{3}$ $x 2: 4u \rightarrow \frac{1}{3}$ [M1] $8u \rightarrow \frac{2}{3}$

	$8u - 3u = 5u$ $5u \rightarrow \$750$ [M1] $1u \rightarrow \$150$ $3u \rightarrow \$450$ [A1] <u>Or</u> $\frac{1}{3} \div \frac{4}{7} = \frac{7}{12}$ (Remainder) [M1] $5u \rightarrow \$750$ [M1] $1u \rightarrow \$150$ $3u \rightarrow \$450$ [A1]
7	(a) $24 \times 60 \times 60 = 86400$ $86400 \times 2\text{ml} = 172800\text{ml} = 172.8 \text{ l}$ [M1A1] (b) $0.20 \times 172.8 = \$34.56$ [A1]
8	$3.2\text{km} = 3200\text{m}$ $3200\text{m} \div 25\text{m} = 128$ [M1] $128 + 1 = 129$ [M1] $129 \times \$55 = \7095 [A1]
9	(a) $x + (x + 4) + x + (x + 6) + (x - 3) = 5x + 7$ [A1] (b) Wire left = $105 - 5x - 7$ OR $5 \times 14 + 7 = 77$ $= 98 - 5x$ $105 - 77 = 28$ [M1] $98 - 5 \times 14 = 28$ [M1A1]
10	(a) $44 - 38 = 6$ [A1] (b) $100\% - 35\% = 65\%$ $38 + 22 + 44 = 104$ [M1] $65\% \rightarrow 104$ $35\% \rightarrow \frac{104}{65} \times 35 = 56$ [A1]



<p>11</p>	<p>(a) Cost of a child's ticket = $\\$58 \div 2 = \\29 [A1] (b) Assume all tickets sold were adult tickets $402 \times \\$58 = \\$23\,316$ Extra = $\\$23\,316 - \\$17\,690 = \\$5626$ [M1] Difference = $\\$58 - \\$29 = \\$29$ [M1] No. of children = $\\$5626 \div \\$29 = 194$ [A1]</p>
<p>12</p>	<p>1 car \rightarrow 2500 10 cars \rightarrow $2500 \times 10 = 25\,000$ [M1] $25\,000 + 3000 = 28\,000$ [M1] $127\,000 \div 28\,000 = 4R\ \\$15\,000$ [M1] $4 \times 10 = 40$ $15\,000 \div 2500 = 6$ $40 + 6 = 46$ [A1]</p>
<p>13</p>	<p>$20\text{ cm} \div 2 = 10\text{cm}$ (radius of circle) Area of triangle ABC = $\frac{1}{2} \times 20\text{ cm} \times 20\text{ cm} = 200\text{ cm}^2$ [M1] Area of triangle ABD = $200 \div 2 = 100$ Area of semicircle = $\frac{1}{2} \times 3.14 \times 10\text{ cm} \times 10\text{cm} = 157\text{ cm}^2$ [M1] Area of segment = $(157\text{ cm}^2 - 100\text{ cm}^2) \div 2 = 28.5\text{cm}^2$ [M1] Area of shaded = $100\text{cm}^2 - 28.5\text{cm}^2 = 71.5\text{cm}^2$ [A1]</p>
<p>14</p>	<p>(a) Total mass = $38\text{ kg} \times 4 = 152\text{ kg}$ [M1] Total mass of A+B+C = $37\text{ kg} \times 3 = 111\text{ kg}$ [M1] D mass = $152\text{ kg} - 111\text{kg} = 41\text{ kg}$ C mass = $77\text{ kg} - 41\text{ kg} = 36\text{ kg}$ [A1] (b) Andrea's mass = $152\text{ kg} - 36\text{ kg} - 41\text{ kg} - 41\text{ kg} = 34\text{ kg}$ [A1]</p>

<p>15</p>	<p>(a) $\frac{7}{8} - \frac{1}{12} = \frac{19}{24}$ [M1]</p> <p>$\frac{19}{24} \div \frac{1}{6} = \frac{114}{24} = 4\frac{3}{4}$ [M1]</p> <p>Ans is 4 [A1]</p> <p>(b) $\frac{3}{4} \times \frac{1}{6} = \frac{1}{8} \ell$ [A1]</p>
<p>16</p>	<p>(a) Store A 100% → 144 [M1]</p> <p>Store B 96% → 144 100% → $\frac{144}{96} \times 100$</p> <p>Ans: \$150 [A1]</p> <p>(c) Store B 150 – 112.50 = 37.50 37.50 ÷ 150 × 100% = 25% [M1]</p> <p>Store A 100% → 144 25% → $\frac{144}{100} \times 25$ [M1] Ans: \$36 [A1]</p>
<p>17</p>	<p>(a) LCM of (12, 15) = 2 × 2 × 3 × 5 = 60 [M1] No of packs of hotdogs = $\frac{60}{15} \times 6 = 24$ [A1]</p> <p>(b) No of packs Mrs Rahmah bought = $\frac{84}{12} \times 4 = 28$ [M1]</p> <p>No of pies = 28 × 8 = 224 224 – 20 = 204 (No of pies left for Mrs Rahmah) 204 – 88 = 116 (No of pies Mrs Ong had left) 116 – 20 = 96 [M1]</p> <p>No of packs Mrs Ong bought = $\frac{96}{8} = 12$ [A1]</p>

