

**PSLE Mathematics (Standard)**

**Answer Key**

**Paper 1**

**Booklet A (20 marks)**

**Questions 1 to 10: 1 mark each**

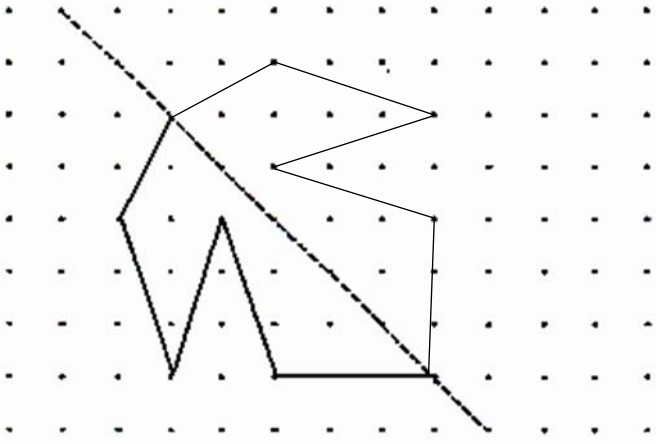
**Questions 11 to 15: 2 marks each**

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

**Booklet B**

**Question 16 to 20 : 1 mark each**

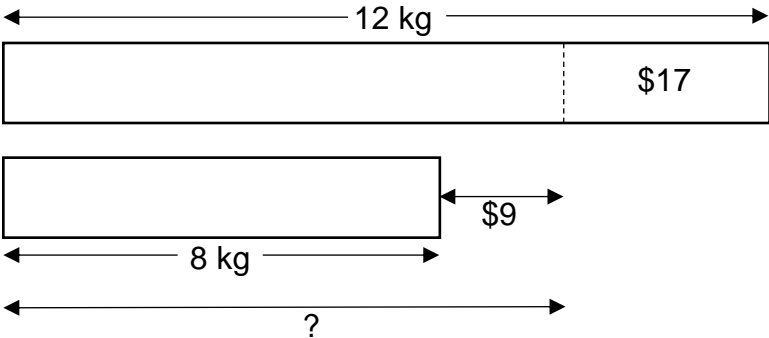
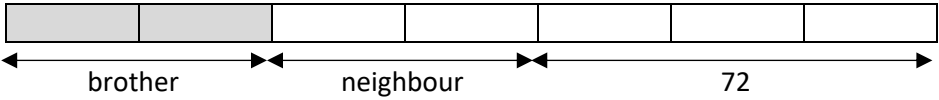
**Questions 21 to 30: 2 marks each**

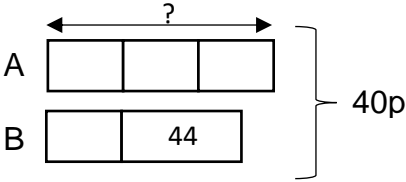
<b>Question</b>	<b>Answer</b>
<b>16</b>	44
<b>17</b>	$1\frac{4}{7}$ or $11/7$
<b>18</b>	136 m / min
<b>19</b>	$1728 \text{ cm}^3$
<b>20</b>	
<b>21</b>	$10 + 10 = \underline{20}$ [M1A1]

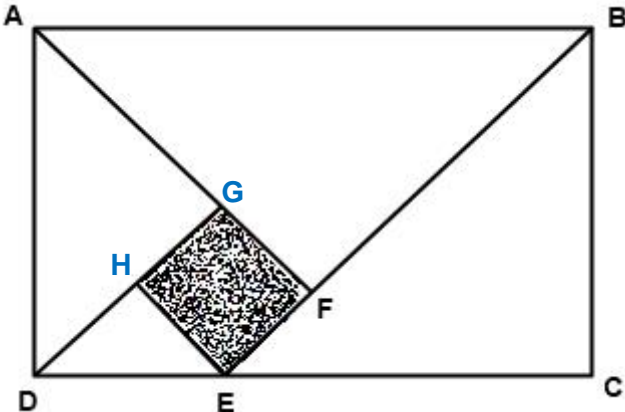
22	$\frac{5020}{1000} \div \frac{20}{60} \quad \text{[M1]}$ $= \frac{5020}{1000} \times \frac{60}{20}$ $= \underline{\underline{15.06 \text{ km/h}}} \quad \text{[A1]}$												
23	$100\% - 20\% = 80\%$ $100\% \rightarrow \$32$ $80\% \rightarrow \frac{32}{100} \times 80 = \underline{\underline{\$25.60}} \quad \text{[M1A1]}$												
24	$8u \rightarrow 56$ $1u \rightarrow 7 \quad \text{[M1]}$ $5u + 7u = 12u$ $12u \rightarrow 12 \times 7 = \underline{\underline{84}} \quad \text{[A1]}$												
25	$\text{Area of } \triangle ACE = \frac{1}{2} \times 8 \times 8 = 32 \text{ cm}^2$ $\text{Area of } \triangle BCD = \frac{1}{2} \times 4 \times 4 = 8 \text{ cm}^2$ $\text{Area of shaded part} = 32 - 8 = \underline{\underline{24 \text{ cm}^2}} \quad \text{[M1A1]}$												
26	$\frac{5}{7} \div \frac{1}{7} = \frac{5}{7} \times 7$ $= \underline{\underline{5}} \quad \text{[M1A1]}$												
27	$\angle CEH = 90^\circ \text{ (CEFG is a square)}$ $\angle ECH = 180^\circ - 90^\circ - 62^\circ$ $= 28^\circ \text{ (}\angle\text{s sum of } \triangle\text{)}$ $\angle DCE = 90^\circ - 28^\circ$ $= \underline{\underline{62^\circ}} \text{ (ABCD is a rectangle)} \quad \text{[M1A1]}$												
28	$189 \div 7 = 27$ $297 - 189 = 108$ $108 \div 27 = \underline{\underline{4}} \quad \text{[M1A1]}$												
29	$5 + 2 = \underline{\underline{7}} \quad \text{[M1A1]}$												
30	<div style="text-align: center;"> <p><b>Money Earned at a Charity Drive</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Group</th> <th>Money Earned</th> </tr> </thead> <tbody> <tr> <td>6P</td> <td>600</td> </tr> <tr> <td>6Q</td> <td>800</td> </tr> <tr> <td>6R</td> <td>400</td> </tr> <tr> <td>6S</td> <td>1000</td> </tr> <tr> <td>6T</td> <td>800</td> </tr> </tbody> </table> </div>	Group	Money Earned	6P	600	6Q	800	6R	400	6S	1000	6T	800
Group	Money Earned												
6P	600												
6Q	800												
6R	400												
6S	1000												
6T	800												

Paper 2

Questions 1 to 5 : 2 marks each

Question	Answers
1	$25n + 3 - 6n = 19n + 3$ (Serene) $25n + 3 + 19n + 3 = \underline{\underline{44n + 6}}$ years old [M1A1]
2	 <p> <math>\\$17 + \\$9 = \\$26</math>  <math>12 \text{ kg} - 8 \text{ kg} = 4 \text{ kg}</math>  <math>4 \text{ kg} \rightarrow \\$26</math>  <math>1 \text{ kg} \rightarrow \\$6.50</math>  <math>\\$6.50 \times 8 + \\$9 = \underline{\underline{\\$61}}</math> [M1A1]         </p>
3	 <p> <math>3u \rightarrow 72</math>  <math>1u \rightarrow 24</math> [M1]  <math>2u \rightarrow 24 \times 2 = \underline{\underline{48}}</math> [A1]         </p>
4	$123 + 238 + 357 + 272 + 110 = 1100$ $\frac{110}{1100} \times 100\% = \underline{\underline{10\%}}$ [M1A1]
5	$\frac{1}{4} \times \frac{22}{7} \times 28 \times 28 = 616$ $\frac{1}{2} \times 28 \times 32 = 448$ $616 + 448 = \underline{\underline{1064 \text{ cm}^2}}$
6	$80 \text{ cents} + 40 \text{ cents} = \$1.20$

	$38.4 \div 1.2 = 32$ <b>[M1]</b> $32 \times \$0.40 = \underline{\$12.80}$ <b>[M1A1]</b>
7	 <p>(a) <math>4u + 44 \rightarrow 40p</math> <b>[M1]</b>  <math>4u \rightarrow 40p - 44</math>  <math>u \rightarrow 10p - 11</math>  <math>3u \rightarrow \underline{30p - 33}</math> <b>[A1]</b></p> <p>(b) Given that <math>p = 10</math>,  <math>30p - 33 = 30 \times 10 - 33 = \underline{267}</math> <b>[A1]</b></p>
8	$S\$1200 \times 0.72 = US\$864$ <b>[M1]</b> $US\$864 \div 0.24 = \underline{3600}$ <b>Malaysian Ringgit [M1A1]</b>
9	$3.14 \times 20 + 65 + 65 = 192.8$ m <b>[M1]</b> $192.8 \times 5 = \underline{964}$ m <b>[M1A1]</b>
10	<p>(a) <math>\\$3580 \times 12 \times 30 = \underline{\\$1\,288\,800}</math> <b>[A1]</b></p> <p>(b) <math>\\$4200 \times 12 \times 20 = \underline{\\$1\,008\,000}</math> <b>[M1]</b>  <math>\\$1\,288\,800 - \\$1\,008\,000 = \underline{\\$280\,800}</math> <b>[A1]</b></p>
11	$\frac{7}{12} \div 15 = \frac{7}{180}$ <b>[M1]</b> $\frac{7}{180} \times 18 = \frac{7}{10}$ $1 - \frac{7}{10} = \frac{3}{10}$ $\frac{3}{10} \rightarrow 240$ <b>[M1]</b> $\frac{10}{10} \rightarrow 240 \div 3 \times 10 = \underline{800}$ <b>[M1A1]</b>

12	 <p>EH = 56 cm <math>\div</math> 4 = 14 cm (length of each side of square EFGH) <b>[M1]</b>  Area of EFGH = 14 cm x 14 cm = 196 cm<sup>2</sup>  DH = EH = 14 cm (<math>\Delta</math>DEH is isosceles)  Area of <math>\Delta</math>DEH = <math>\frac{1}{2}</math> x 14 cm x 14 cm = 98 cm<sup>2</sup>  AG = DG = 14 cm + 14 cm = 28 cm <b>[M1]</b>  Area of <math>\Delta</math>ADG = <math>\frac{1}{2}</math> x 28 cm x 28 cm = 392 cm<sup>2</sup>  AF = BF = 28 cm + 14 cm = 42 cm  Area of <math>\Delta</math>ABF = <math>\frac{1}{2}</math> x 42 cm x 42 cm = 882 cm<sup>2</sup>  Area of <math>\Delta</math>BCE = 882 x 8 <math>\div</math> 9 = 784 cm<sup>2</sup>  Area of rectangle ABCD = 196 + 98 + 392 + 882 + 784 = <b><u>2352 cm<sup>2</sup></u></b>  <b>[M1A1]</b></p>
13	<p>(a) 5.44 <math>\div</math> 4 = <b><u>1.36 m</u></b> <b>[A1]</b></p> <p>(b) 1.36 m + 0.2 m = 1.56 m (average height of 5 boys)  1.56 m x 5 = 7.8 m (total height of 5 boys) <b>[M1]</b>  1.56 m + 0.03 m = 1.59 m (average height of 6 boys)  1.59 m x 6 = 9.54 m  9.54 m - 7.8 m = <b><u>1.74 m</u></b> <b>[M1A1]</b></p>
14	<p>(a) Let n be the number of pupils in Mrs Tan's class.  <math>8n - 6 = 5n + 108</math> <b>[M1]</b>  <math>8n - 5n = 108 + 6 = 114</math>  <math>3n = 114</math>  <math>n =</math> <b><u>38</u></b> <b>[A1]</b></p> <p><b>OR</b></p> <p><math>108 + 6 = 114</math>  <math>8 - 5 = 3</math>  <math>114/3 =</math> <b><u>38</u></b> <b>[M1A1]</b></p> <p>(b) <math>8n - 6 = 8 \times 38 - 6 =</math> <b><u>298</u></b> <b>[M1A1]</b></p> <p><b>OR</b></p>

	$5 \times 38 = 190$ $190 + 108 = \mathbf{298}$ <b>[M1A1]</b>
15	<p>(a) <math>22\,500 \div 5 \times 6 = 27\,000 \text{ m}^3</math>  <math>\sqrt[3]{27\,000} = \mathbf{30 \text{ m}}</math> <b>[M1A1]</b></p> <p>(b) <math>22\,500 \div 2 \times 3 = 33\,750 \text{ m}^3</math>  <math>33\,750 \div 50 \div 15 = \mathbf{45 \text{ m}}</math> <b>[M1A1]</b></p>
16	<p>(a) Jolene left Town A at 8.45 am (20 min later than Terence)  Time taken by Terence to reach Town B = <math>300 \div 60 = 5 \text{ h}</math>  <b>[M1]</b>  Time Jolene reached Town B = <math>\mathbf{1.15 \text{ pm}}</math> <b>[M1A1]</b></p> <p>(b) Time taken by Jolene to reach Town B  = <math>5 \text{ h} - 10 \text{ min} - 20 \text{ min}</math>  = <math>4 \text{ h } 30 \text{ min}</math>  <math>4 \text{ h } 30 \text{ min} = 4\frac{1}{2} \text{ h}</math>  Average speed of Jolene = <math>300 \text{ km} \div 4\frac{1}{2} \text{ h} = \mathbf{66\frac{2}{3} \text{ km/h}}</math> <b>[M1A1]</b></p>
17	<p>(a) General form of pattern is <math>5n - 2(n - 1)</math> <b>[M1]</b> or <math>(3 \times n) + 2</math>  <b>[M1]</b>, where n is the Pattern no.  Pattern 4, ie. <math>n = 4</math>  <math>5 \times 4 - 2 \times (4 - 1) = 20 - 6 = \mathbf{14}</math> <b>[A1]</b></p> <p><b>OR</b></p> <p><math>3 \times 4 + 2 = 14</math> <b>[M1A1]</b></p> <p>(b) <math>(302 - 2) / 3 = 100</math> <b>[M2A1]</b></p> <p><b>OR</b></p> <p><math>302 - 5 = 297</math>  <math>297 / 3 = 99</math>  <math>99 + 1 = 100</math> <b>[M2A1]</b></p>