

**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>4</b>	<b>6.</b>	<b>2</b>	<b>11.</b>	<b>3</b>
<b>2.</b>	<b>4</b>	<b>7.</b>	<b>2</b>	<b>12.</b>	<b>3</b>
<b>3.</b>	<b>4</b>	<b>8.</b>	<b>4</b>	<b>13.</b>	<b>3</b>
<b>4.</b>	<b>2</b>	<b>9.</b>	<b>1</b>	<b>14.</b>	<b>1</b>
<b>5.</b>	<b>1</b>	<b>10.</b>	<b>1</b>	<b>15.</b>	<b>1</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>	$3 + \frac{3}{10} + \frac{215}{1000}$ $= 3.515$
<b>17</b>	$68 - 12 \div 2 + 13 = 75$
<b>18</b>	210
<b>19</b>	0.125
<b>20</b>	8 a.m.
<b>21</b>	$250 \text{ g} - 100 \text{ g} = 150 \text{ g}$ $150 \text{ g} \div 50 \text{ g} = 3$ Amount paid = \$5 + 3(\$2) = <b>\$11</b>
<b>22</b>	$\angle AEB = 65^\circ$ $\angle ABE = 180^\circ - 65^\circ - 65^\circ = 50^\circ$ $\angle CBE = 90^\circ - 50^\circ = 40^\circ$ $\angle BCE = (190^\circ - 40^\circ) \div 2 = \mathbf{75^\circ}$
<b>23</b>	<b>Point E</b>
<b>24</b>	$103 - 3 \times 9 - \frac{18}{3} = \mathbf{70}$
<b>25</b>	Volume = $10 \times 3 \times 3 = \mathbf{90 \text{ cm}^3}$
<b>26</b>	Total stamps bought = $24z$ Stamps left after giving her friends = $24z - 27$ Stamps in each box = $\frac{24z - 25}{7}$

<b>27</b>	$12u - 10u = 2u$ $\$50 \div 2 = \$25$ $\$25 \times 12 = \mathbf{\$300}$
<b>28</b>	Largest possible number of women = least number of men 1 group of people = 4 people (W M M M) Number of groups – $115 \div 4 = 28R3 \rightarrow$ last group has 1 less M (W M M) Largest possible number of women = $28 + 1 = \mathbf{29}$
<b>29</b>	At first, total = $5u$ Total left = $2u$ $5u = 2u + 21(5)$ $3u = 105$ $1u = \mathbf{35}$
<b>30</b>	$\frac{\text{Watches sold by B}}{\text{Total sold}} = \frac{26u}{24u + 26u + 18u + 30u}$ $= \frac{26}{98}$ $= \frac{13}{49}$

## Paper 2

### Questions 1 to 5 : 2 marks each

Question	Answer
<b>1</b>	3 stools + 5 desks $\rightarrow$ \$360 6 stools + 10 desks $\rightarrow$ \$720 5 desks $\rightarrow$ \$900 - \$720 = \$180 1 desk $\rightarrow$ <b>\$40</b>
<b>2</b>	$2u = 44$ $1u = 22$ $7u = \mathbf{154}$
<b>3</b>	$180^\circ - (52^\circ \times 2) = 76^\circ$ $52^\circ + 76^\circ = \mathbf{128^\circ}$
<b>4</b>	$(13 \times \$10) + (2 \times \$5) = \$140$ $140 - 75 = 75$ $65 \div 5 = \mathbf{13}$
<b>5</b>	$800 + 1600 = 2400$ $2400\text{m}\ell = \mathbf{2.4\ell}$
<b>6</b>	(a) $100\% - 15\% - 30\% - 25\% = \mathbf{30\%}$  (b) Percentage of students in Brownies = $\frac{2}{5} \times 30\% = 12\%$ Number of students in Brownies = $\frac{12}{100} \times 300 = \mathbf{36}$

7	Total volume = $(24 \times 20 \times 14) + 85 \times 14 \times (42 - 24) = 28\,140\text{cm}^3$ $= 28.14 \ell \div 2.01 = \mathbf{14 \text{ min}}$
8	(a) $250 + 190 = 420$ $1680 \div 420 = 4 \text{ hour}$ 8am $\rightarrow$ <b>12pm</b>  (b) Train X = <b>920 km</b> Train Y = <b>760 km</b>
9	No of soccer balls added = $40\% \times 45 = 18$ No of netballs added = $25\% \times 68 = 17$ No of basketballs added = $80 - 18 - 17 = 45$ Percentage increase = $\frac{45}{30} \times 100\% = \mathbf{150\%}$
10	Time taken for Tammy = $20 \div 30 = 40 \text{ min}$ Time taken for Adam = $40 + 15 = 55 \text{ min} = \frac{11}{12} \text{ hour}$  Distance = $42 \times \frac{11}{12} = \mathbf{38.5 \text{ km}}$
11	(a) $180 - 68 = 112^\circ$  (b) $180 - 68 - 42 = 70^\circ$  (c) $180 - 70 = 110^\circ$
12	$2120 - 536 = 1584$ $\frac{3}{4}$ of girls = $9u$  Total girls = $12u$ $12u + 4u = 1584$ $1u = 1584 \div 16 = 99$ $5u = 99 \times 5 = \mathbf{495}$
13	(a) A : B : C $4 : 2 : 1$ $20 : 10 : 5$ $20 + 10 + 5 = 35$ $35u : 7.35$ $1u : 0.21$ $\frac{4}{5} : 20$  $\frac{1}{5} : 5$  $0.21 \times 5 = \mathbf{1.05 \text{ \pounds}}$

	(b) $2.1 \div 4 = 0.525$ $1.05 - 0.525 = \mathbf{0.525 \text{ \pounds}}$
<b>14</b>	(a) $6 \times 2 + 1 = \mathbf{13}$  (b) $99 - 1 = 98$ $98 \div 2 = \mathbf{49}$
<b>15</b>	Shaded area = big quadrant – unshaded AFBG $= \frac{1}{5} \times \pi \times r^2$ $= \frac{1}{5} \times 3.14 \times (24)^2$ $= 452.16 \text{ cm}^2$  Area of AFBG = $24 \times 12$ $= 288 \text{ cm}^2$ Area of shaded part $= 452.16 \text{ cm}^2 - 288 \text{ cm}^2$ $= \mathbf{164.16 \text{ cm}^2}$
<b>16</b>	(a) $\$6120 - \$3240 = \$2880$ $\$2880 \div 2 = \$1440$ $\$1440 + \$3240 = \mathbf{\$4680}$  (b) $\$4680 \div 4 = \$1170$ $\$1440 - \$1170 = \$270$ $\$270 \div 15 = \mathbf{18}$
<b>17</b>	(a) Total units = $4 \times 3 = 12u$ Fraction Abu had in the end = $\frac{1}{12}$ (b) <u>Before</u> A : B : C : D $= 1u : 5u : 3u : 3u$  <u>After Bob gave Cheryl</u> A : B : C : D $= 1u : 4u : 4u : 3u$ $= 2u : 8u : 8u : 6u$  <u>After Cheryl gave Donna</u> A : B : C : D $= 2u : 8u : 5u - \$55 : 9u + \$55$ $= 2u : 8u : 8u : 6u$  $9u + \$55 = \$595$ $9u = \$540$ $1u = \$60$ $24u = \$60 \times 24 = \mathbf{\$1440}$