

3rd Kyu Section 2: Application Test Answer Keys

1	(1)	26.4°C
	(2)	July 22
2	(3)	$25a\text{ cm}^3$
	(4)	$(20a + 50)\text{ cm}^2$
3	(5)	$\triangle ACD$ and $\triangle CBE$
	(6)	(a), (b) and (f)
	(7)	Two sides and the included angle of one triangle are equal to the corresponding parts of the second triangle. (SAS)
4	(8)	$\begin{cases} x + y = 30 \\ 7x + 2y = 95 \end{cases}$
	(9)	$x = 7$, $y = 23$
5	(10)	$a = 2$

Please fill in the box below.

Name	Examinee Number
Gender (Check the appropriate box) Male <input type="checkbox"/> Female <input type="checkbox"/>	Age
Date of Birth (year) (month) (day)	
Address	

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5	(11)	$y = 8$
	(12)	<p>Since the coordinates of point B is (2, 8), the coordinates of point C is (4, 8). Substitute $x = 4$ and $y = 8$ into $y = bx^2$.</p> $8 = b \times 4^2$ $16b = 8$ $b = \frac{1}{2}$ <p>(Answer) $b = \frac{1}{2}$</p> <hr style="width: 50%; margin-left: 0;"/>
6	(13)	1 2 Exs
	(14)	3 8 Exs
	(15)	4 hours
7	(16)	$4\sqrt{2}$ cm
	(17)	$24\sqrt{2}$ cm ²
8	(18)	3 4
	(19)	$a = 1$ $h = 13$
9	(20)	