Calculus ex01			$10,\mathrm{Apr},201$			
			← Please encode your student number, and write your first and last names below.  First name and last name:			
	th a 👫 may ha	ave zero, one	e or more right	answers.		
Question 1 $\cap$		) 1297	0 1295	O 216	<b>1</b> 296	
Question 2	Evaluate $3^{-1}$			<ul><li>○ 210</li><li>○ -3</li></ul>	-	
Question 3		0 -8	$\bigcirc  \pm 2\sqrt{2}$	$\bigcirc  \frac{1}{8}$	O 64	
Question 4 🌲	$\left(\frac{1}{5^2}\right)^{-1}$	$\bullet$ 5 <sup>2</sup>			$\bigcirc  \frac{1}{5^2}$	
Question 5	Evaluate $2^9 \times$	$\leq 2^7$ .				
	$\bigcirc$ 2 <sup>3</sup>		$\bigcirc$ 2 <sup>63</sup>	$\bigcirc$ 2 <sup>62</sup>	$\bigcirc  2^{17}$	
Question 6	Solve the equ	ation $\log_x 36$	$\beta = 2.$			
	$\bigcirc  12$	0 8	$\bigcirc  2$	<b>6</b>	O 3	
Question 7	Solve the equ					
	$\bigcirc$ 5 <sup>3</sup>		$\bigcirc$ 6 <sup>4</sup>	$\bigcirc$ 5 <sup>4</sup>	$\bigcirc$ 6 <sup>2</sup>	
Question 8		_				
	() 0	$\bigcirc  2$	$\bigcirc$ $-2$		• 1	

Calculus ex01	$10,  \mathrm{Apr},  2019$
	← Please encode your student number, and write your first and last names below.  First name and last name:
Question 1 Evaluate 5 <sup>4</sup> .	
$\bigcirc  624 \qquad  \bigcirc  626$	$\bigcirc 3125 \qquad \blacksquare 625 \qquad \bigcirc 125$
Question 2 Evaluate $2^{-1}$ .	
$\bigcirc -3 \qquad \bigcirc \sqrt{2}$	
Question 3 Evaluate $5^{\frac{1}{2}}$ .	
$\bigcirc  \frac{1}{5} \qquad \qquad \blacksquare  \sqrt{5}$	$\bigcirc  \pm \sqrt{5} \qquad \bigcirc  25 \qquad \bigcirc  -5$
Question 4 $\clubsuit$ Evaluate $\left(\frac{1}{7}\right)^{-4}$ .	
$ \bigcirc \sqrt[4]{7} \qquad \qquad 0 \qquad \left(\frac{1}{7^4}\right)^{-1} \\ \bigcirc \qquad None \ of \ to  $	$ \bigcirc \frac{1}{7^4} \qquad \bigcirc (7^4)^{-1} \qquad \blacksquare \qquad 7^4 $ these answers are correct.
Question 5 Evaluate $2^8 \times 2^6$ .	
	$\bigcirc  2^{15} \qquad \qquad \bigcirc  2^{3} \qquad \qquad \bigcirc  2^{48}$
Question 6 Solve the equation $\log_x 216$	16 = 3.
● 6 ○ 18	$\bigcirc \hspace{0.1cm} 4 \hspace{0.1cm} \bigcirc \hspace{0.1cm} 9 \hspace{0.1cm} \bigcirc \hspace{0.1cm} 3$
Question 7 Solve the equation $\log_6 x =$	=-3.
$\bigcirc  6^{-2} \qquad  \bigcirc  5^{-2}$	$\bigcirc 6^{-4} \bigcirc 5^{-3} \bigcirc 6^{-3}$
Question 8 Solve the equation $\log_5(5 -$	$-x) = 2\log_{25}(x+1).$
$\bigcap$ 0 $\bigcap$ 4	$\bigcap$ 3 $\bigcap$ 1 $\blacksquare$ 2

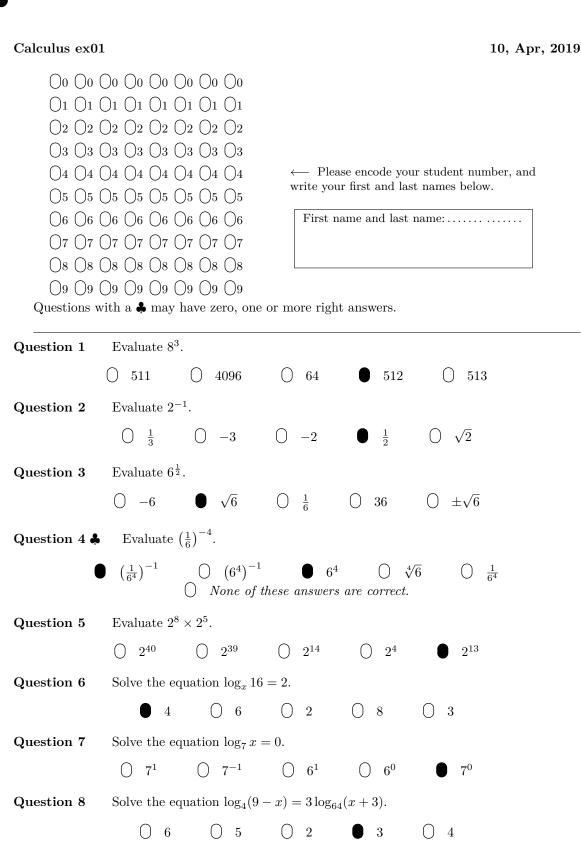
Calculus ex01	$10,  \mathrm{Apr},  2019$
$\bigcirc$ 1 $\bigcirc$ 1 $\bigcirc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
04 04 0 05 05 0 06 06 0 07 07 0 08 08 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
	th a 4 may have zero, one or more right answers.
$\begin{matrix}\\ \text{Question 1} \end{matrix}$	
Question 2	16807 () 2400 () 343 () 2402 $\blacksquare$ 2401 Evaluate $8^{-1}$ . () $-9$ () $\frac{1}{9}$ () $\sqrt{8}$ $\blacksquare$ $\frac{1}{8}$ () $-8$
Question 3	Evaluate $2^{\frac{1}{2}}$ . $\bigcirc -2$ $\bigcirc \frac{1}{2}$ $\bigcirc 4$ $\bigcirc \pm \sqrt{2}$ $\bigcirc \sqrt{2}$
	Evaluate $\left(\frac{1}{7}\right)^{-4}$ . $\left(7^{4}\right)^{-1}  \bigoplus  \left(\frac{1}{7^{4}}\right)^{-1}  \bigcirc  \sqrt[4]{7}  \bigcirc  \frac{1}{7^{4}} \qquad \bigoplus  7^{4}$ $\bigcirc  None \ of \ these \ answers \ are \ correct.$
Question 5	Evaluate $2^8 \times 2^6$ . $\bigcirc 2^{47}  \blacksquare  2^{14}  \bigcirc  2^3  \bigcirc  2^{15}  \bigcirc  2^{48}$
Question 6	Solve the equation $\log_x 16 = 2$ .
Question 7	Solve the equation $\log_4 x = -1$ . $\bigcirc 4^{-2}  \bullet 4^{-1}  \bigcirc 3^0  \bigcirc 3^{-1}  \bigcirc 4^0$
	Solve the equation $\log_3(2-x) = 3\log_{27}(x+5)$ . $-3.5$ $\bigcirc$ $-2.5$ $\bigcirc$ $-1.5$ $\bigcirc$ $-4.5$ $\bigcirc$ $-0.5$

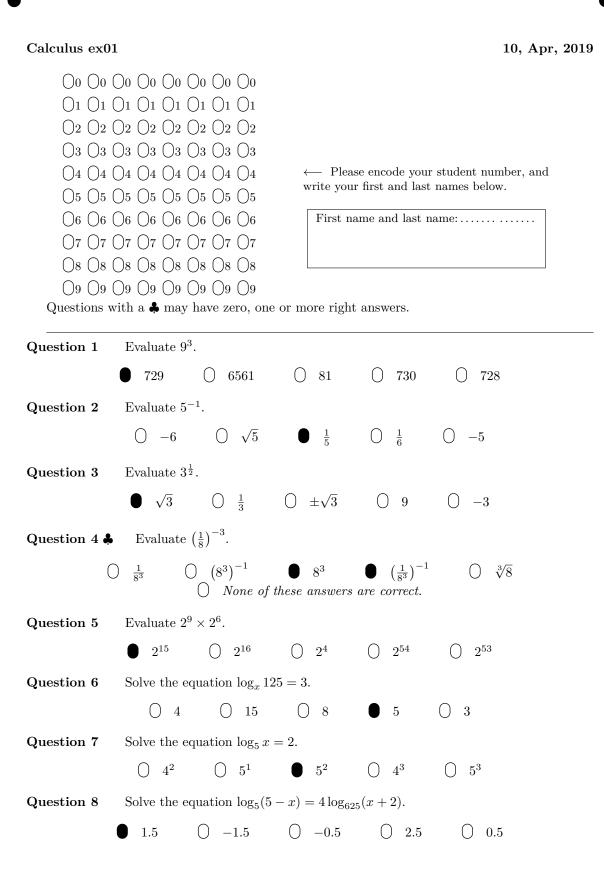
Calculus ex01	$10,  \mathrm{Apr},  2019$
$\bigcirc 0 \bigcirc 0$	
$\bigcirc 1$	
$\bigcirc 2 \bigcirc 2$	
$\bigcirc 3 \ \bigcirc 3$	
$\bigcirc 4 \ \bigcirc 4$	← Please encode your student number, and
$\bigcirc 5 \bigcirc 5$	write your first and last names below.
$\bigcirc 6 \bigcirc 6$	First name and last name:
07 07 07 07 07 07 07	
08 08 08 08 08 08 08	
	. 14
Questions with a $\clubsuit$ may have zero, one of	or more right answers.
Question 1 Evaluate 7 <sup>4</sup> .	
$\bigcirc 343 \qquad \bigcirc 16807$	<b>●</b> 2401 ○ 2400 ○ 2402
Question 2 Evaluate $9^{-1}$ .	
$\bigcirc  \frac{1}{10} \qquad \bigcirc  -10$	$\bigcirc -9 \qquad \bigcirc \sqrt{9} \qquad \bullet  \frac{1}{9}$
Question 3 Evaluate $8^{\frac{1}{2}}$ .	
$\bigcirc  \pm 2\sqrt{2} \qquad  \bigcirc  \frac{1}{8}$	
Question 4 $\clubsuit$ Evaluate $\left(\frac{1}{2}\right)^{-4}$ .	
$ \bigcirc (2^4)^{-1} \qquad \bigcirc \frac{1}{2^4} $ $ \bigcirc None \ of \ th$	
Question 5 Evaluate $2^5 \times 2^8$ .	
$\bigcirc  2^4 \qquad  \bigcirc  2^{40}$	$\bigcirc 2^{14} \bigcirc 2^{39} \bigcirc 2^{13}$
<b>Question 6</b> Solve the equation $\log_x 64$ =	=3.
$\bigcirc  12 \qquad \bigcirc  4$	<b>●</b> 4 ○ 3 ○ 7
Question 7 Solve the equation $\log_7 x =$	= -2.
$\bigcirc  7^{-1} \qquad \bigcirc  6^{-1}$	$\bigcirc  7^{-3} \qquad \qquad \blacksquare  7^{-2} \qquad \qquad \bigcirc  6^{-2}$
<b>Question 8</b> Solve the equation $\log_2(2 -$	$-x) = 2\log_4(x+6).$
	$\bigcirc  0 \qquad \bigcirc  -4 \qquad \bigcirc  -1$

Calculus ex01	L				10, Apr,	2019
01 01 0 02 02 0 03 03 0 04 04 0 05 05 0 06 06 0 07 07 0 08 08 0 09 09 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	01	write your	first and last	student number, and names below.	
Question 1	Evaluate $9^3$ .					
	730	6561	0 81	<b>1</b> 729	O 728	
Question 2	Evaluate 7 <sup>-1</sup>	<sup>1</sup> .				
	○ -8		$\bigcirc  \sqrt{7}$	$\bigcirc$ -7	$\bigcirc$ $\frac{1}{8}$	
Question 3	Evaluate $4^{\frac{1}{2}}$ .					
	$\bigcirc$ $-4$	$\bigcirc  \pm 2$	$\bigcirc  \frac{1}{4}$	O 16	<b>1</b> 2	
Question $4 \clubsuit$	Evaluate (	$(\frac{1}{7})^{-3}$ .				
	$7^3$	$\left(\frac{1}{7^3}\right)^{-1}$			$\bigcirc  \frac{1}{7^3}$	
Question 5	Evaluate 2 <sup>7</sup>	$\times 2^8$ .				
	$\bigcirc  2^{16}$	$\bigcirc  2^{56}$		$\bigcirc  2^{55}$	$\bigcirc$ 2 <sup>2</sup>	
Question 6	Solve the eq	uation $\log_x 21$	16 = 3.			
	$\bigcirc  3$	O 18	$\bigcirc$ 4	9	<b>6</b>	
Question 7	Solve the eq	uation $\log_4 x$	=3.			
	$\bigcirc$ 4 <sup>4</sup>	$\bigcirc$ 4 <sup>2</sup>	$\bigcirc$ 3 <sup>4</sup>	$\bigcirc  3^3$		
Question 8	Solve the eq	uation $\log_4(5)$	$-x) = 3\log_{64}$	(x+7).		
	$\bigcirc  1$	$\bigcirc$ $-2$	<b>●</b> -1	$\bigcirc  2$	0	

Calculus ex01					$10,  \mathrm{Apr},  2019$
$\bigcirc 1 \bigcirc 1 \bigcirc 1 \bigcirc 2 $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccc} 1 & \bigcirc 1 & \bigcirc 1 \\ 2 & \bigcirc 2 & \bigcirc 2 \end{array} $			
$ \begin{array}{cccc} \bigcirc 4 & \bigcirc 4 & \bigcirc \\ \bigcirc 5 & \bigcirc 5 & \bigcirc \\ \bigcirc 6 & \bigcirc 6 & \bigcirc \\ \bigcirc 7 & \bigcirc 7 & \bigcirc \end{array} $	)3 ()3 ()3 () )4 ()4 ()4 () )5 ()5 ()5 () )6 ()6 ()6 () )7 ()7 ()7 () )8 ()8 ()8 ()8 ()	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	write your	first and last	r student number, and names below.
	)9		or more right	answers.	
Question 1					
Question 2	1296 Evaluate $7^{-1}$ $\sqrt{7}$		<ul><li>○ 7776</li><li>○ -8</li></ul>	$\bigcirc$ 1297 $\bigcirc$ $\frac{1}{7}$	$\bigcirc 216$ $\bigcirc \frac{1}{8}$
Question 3			<b>•</b> 3	$\bigcirc  \frac{1}{9}$	O 81
Question 4 ♣	$\left(\frac{1}{2^5}\right)^{-1}$	$(2^5)^{-1}$	$lacktriangledown 2^5$ hese answers	•	$\overline{2}$ $\bigcirc$ $\frac{1}{2^5}$
Question 5	Evaluate 2 <sup>7</sup>	$\times 2^6$ .			
${f Question}  {f 6}$		$\bigcirc$ 2 <sup>2</sup> nation $\log_x 25$	$ \bigcirc 2^{42} $ $ = 2. $	$\bigcirc  2^{41}$	$\bigcirc$ 2 <sup>14</sup>
	<b>6</b> 5	O 10	O 7	O 3	O 2
Question 7	Solve the equ	uation $\log_6 x$ =	= 0.		
		$\bigcirc$ 6 <sup>1</sup>	$\bigcirc  6^{-1}$	$\bigcirc  5^0$	$\bigcirc  5^1$
Question 8	Solve the equ	nation $\log_3(7 -$	$-x) = 2\log_9(x)$	(x + 1).	
	O 1	<b>1</b> 3	O 4	$\bigcirc  2$	O 5

Calculus ex0	1				$10,\mathrm{Apr},201$	.9
$\bigcirc 0 \bigcirc 0$	00 00 00	0 0 0				
$\bigcirc 1$ $\bigcirc 1$	$\bigcirc 1 \bigcirc 1 \bigcirc 1 \bigcirc$	$\bigcirc 1 \bigcirc 1 \bigcirc 1$				
$\bigcirc 2 \bigcirc 2$	$\bigcirc 2 \bigcirc 2 \bigcirc 2 \bigcirc$	$\bigcirc 2 \bigcirc 2 \bigcirc 2$				
$\bigcirc 3 \bigcirc 3$	$\bigcirc 3 \bigcirc 3 \bigcirc 3 \bigcirc$	$)3 \bigcirc 3 \bigcirc 3$				
	$\bigcirc 4 \bigcirc 4 \bigcirc 4 \bigcirc$			ase encode you ur first and las	r student number, and t names below.	
	$\bigcirc 5 \bigcirc 5 \bigcirc 5 \bigcirc$					
	$\bigcirc 6 \bigcirc 6 \bigcirc 6 \bigcirc$		First	name and last	name:	
	$\bigcirc 7 \bigcirc 7 \bigcirc 7 \bigcirc 7$					
	08 08 08 0					
	09 09 09 0		o on mono nici	at angreens		
Questions	with a 🌲 may l	nave zero, on	e or more rigi	n answers.		
Question 1	Evaluate 9 <sup>3</sup> .					
	730	O 728	<b>1</b> 729	O 6561	O 81	
Question 2	Evaluate 4 <sup>-</sup>	<sup>1</sup> .				
	$lacksquare$ $\frac{1}{4}$	$\bigcirc  \frac{1}{5}$	$\bigcirc  \sqrt{4}$	$\bigcirc$ $-4$	$\bigcirc$ -5	
Question 3	Evaluate $3^{\frac{1}{2}}$					
	$\bigcirc -3$	$\bigcirc  \frac{1}{3}$	9	$\bigcirc  \pm \sqrt{3}$	$lacksquare$ $\sqrt{3}$	
Question 4 &	Evaluate (	$(\frac{1}{4})^{-5}$ .				
	$4^5$	~ -	$(4^5)^{-1}$ these answer			
Question 5	Evaluate 2 <sup>9</sup>	$\times 2^9$ .				
	$\bigcirc$ 2 <sup>80</sup>	$\bigcirc  2^{19}$	$\bigcirc  2^1$		$\bigcirc  2^{81}$	
Question 6	Solve the eq	uation $\log_x 1$	25 = 3.			
	$\bigcirc  3$	<b>6</b> 5	$\bigcirc$ 4	0 8	O 15	
Question 7	Solve the eq	uation $\log_7 x$	= -2.			
	$\bigcirc  7^{-1}$	$\bigcirc  6^{-2}$	$\bigcirc  7^{-3}$	$\bigcirc  6^{-1}$		
Question 8	Solve the eq	uation log <sub>2</sub> (2	$(2-x) = 2\log a$	(x+2).		
-	O 2	_	_	0 1	$\bigcirc$ -2	





Calculus ex01					10, Apr, 201	9
01 01 0 02 02 0 03 03 0 04 04 0 05 05 0 06 06 0 07 07 0 08 08 0 09 09 0	00 00 00 00 00 00 00 00 00 00 00 00 00	01	write your	first and last a	student number, and names below.	
				answers.		_
Question 1	Evaluate $5^4$ .	O 624	O 626	O 3125	625	
			020	0 3125	025	
Question 2	_	_	_		_	
	$\bigcirc$ -8	$\frac{1}{8}$	$\bigcirc$ $\frac{1}{9}$	$\bigcirc$ -9	$\sqrt{8}$	
Question 3	Evaluate $7^{\frac{1}{2}}$ .					
	$ \sqrt{7} $	$\bigcirc$ $\frac{1}{7}$	$\bigcirc  \pm \sqrt{7}$	○ -7	O 49	
Question 4 🌲	Evaluate (	$(\frac{1}{8})^{-4}$ .				
0		<u> </u>			$\bigcirc  \frac{1}{8^4}$	
Question 5	Evaluate $2^8$	$\times 2^9$ .				
	$\bigcirc  2^{18}$	$\bigcirc  2^{72}$	$\bigcirc  2^{71}$	$\bigcirc$ 2 <sup>2</sup>		
Question 6	Solve the eq	uation $\log_x 36$	$\ddot{s}=2.$			
	$\bigcirc  2$	0 8	$\bigcirc  12$	<b>6</b>	O 3	
Question 7	Solve the equ	uation $\log_{6} x$	= 0.			
•	$\bigcirc$ 6 <sup>1</sup>		$\bigcirc$ 5 <sup>1</sup>	$\bigcirc$ 6 <sup>-1</sup>	<b>●</b> 6 <sup>0</sup>	
Ougstiers 9	J	_	_		<del>-</del>	
Question 8				_	0.5	
	-2.5		$\bigcirc -1.5$	0.5	$\bigcirc  -0.5$	