

(大問1)[計70点]

①(1) [4点] 10	①(2) [4点] $\frac{27}{125}$
①(3) [4点] a	
②(1) [5点] $x = 2, 4$	②(2) [5点] $x > -\frac{2}{3}$
②(3) [5点] $x \geq 1$	
③(1) [4点] 1	③(2) [4点] $\frac{9}{2}$
④(1) [5点] $x = 4$	④(2) [5点] $1 < x < 2$
④(3) [5点] $x > 3$	④(4) [10点] $\frac{1}{8} < x < 2$
⑤(1) [10点] 10 桁	

(大問2)[計30点]

①(1)[5点] $0 \leq \theta \leq \frac{5}{6}\pi, \frac{7}{6}\pi \leq \theta < 2\pi$	①(2) [5点] $\theta = \frac{\pi}{6}, \frac{5}{6}\pi, \frac{3}{2}\pi$
②(1) [5点] $\frac{5-12\sqrt{3}}{26}$	②(2) [5点] $\frac{12-5\sqrt{3}}{26}$
③ [10点] $x = \frac{\pi}{6}, \frac{\pi}{2}$	