

$\boxed{1}$
(1)

$$A(2) = \frac{\boxed{1}}{\boxed{5}} \left(\begin{array}{cc} 1 & \boxed{2} \\ \boxed{2} & \boxed{4} \end{array} \right). \cdots \text{ア, イ, ウ, エ, オ}$$

(2)

$$m = \frac{\boxed{-1}}{\boxed{2}}, \cdots \text{カ, キ}$$

$$a_n = \frac{\boxed{1}}{\boxed{5}} + \frac{\boxed{4}}{\boxed{5}} \times \boxed{2}^n. \cdots \text{ク, ケ, コ, サ, シ}$$

$\boxed{2}$

(1)

S_1 の半径は, $\sqrt{\boxed{6}}$. …ス

(2)

$a = \sqrt{\boxed{3}}$. …セ

(3)

$\frac{\sqrt{\boxed{6}}}{\boxed{2}}\pi$. …ソ, タ

(4)

$\frac{\sqrt{\boxed{6}}}{\boxed{3}}$. …チ, ツ

(5)

$\frac{\boxed{2}}{\boxed{3}}\sqrt{\boxed{3}}\pi$. …テ, ト, ナ

[3] (1)

$$a = -\frac{\sqrt{[3]}}{[2]} + \log \left(\sqrt{[3]} - [1] \right). \dots \text{ニ, ヌ, ネ, ノ}$$

(2)

$$y = \left(\sqrt{[3]} - [1] \right) x - \left([1] + \frac{\sqrt{[3]}}{[2]} \right). \dots \text{ハ, ヒ, フ, ヘ, ホ}$$

(3)

$$\log A = -\frac{\sqrt{[2]}}{[2]}. \dots \text{マ, ミ}$$

$$M = -A \left([2] + \sqrt{[2]} \right) + [1] + \frac{[2]}{e}. \dots \text{ム, メ, モ, ヤ}$$

4 (1)

$-2 \notin A, 3 \in A, A \supset B$ つまり,

(b), ...あ (a), ...い (f), ...う

(2)

b は 3 ...ユ

(3)

$c = 8$...ヨ

$f(c) = 2$...ラ

$\lim_{a \rightarrow c-0} f(a) = 2$...リ

$\lim_{a \rightarrow c+0} f(a) = 4$...ル