



$$n = 15, \quad \frac{1}{2^{n-1}} = \frac{1}{2^{14}} = \frac{1}{16384};$$

$$n = 20, \quad \frac{1}{2^{n-1}} = \frac{1}{2^{19}} = \frac{1}{524288};$$

$$n = 21, \quad \frac{1}{2^{n-1}} = \frac{1}{2^{20}} = \frac{1}{1048576}.$$

$$1; \frac{1}{2}; \frac{1}{2^2}; \frac{1}{2^3}; \dots; \frac{1}{2^{n-1}}; \dots;$$

$$q = \frac{1}{2} < 1$$