For each of the following infinite series, answer the questions:

	Does the series converge?	Does the series converge absolutely?
(1) $\sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{n^3}$	YES	YES
(2) $\sum_{n=1}^{\infty} \frac{3n^2-1}{4n^2+2}$	YES	YES
(3) $\sum_{n=1}^{\infty} \frac{(-1)^{n}}{\sqrt{n}}$	YES	NO
(4) $\sum_{n=0}^{\infty} \frac{(-3)^{n+1}}{n!}$	YES	YES
(5) $\sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{\sqrt{n+3}}$	YES	NO
(6) $\sum_{n=3}^{\infty} \frac{(-1)^{n}}{\pi^n}$	YES	YES
(7) $\sum_{n=0}^{\infty} \frac{(-1)^{n} n!}{2^n}$	NO	NO
(8) $\sum_{n=1}^{\infty} \left(\frac{2}{3}\right)^{n-1}$	YES	YES
(9) $\sum_{n=1}^{\infty} \frac{(-1)^{n+1}(n^2+1)}{3n^5-2}$	YES	YES
(10) $\sum_{n=0}^{\infty} -\frac{3}{5^n}$	YES	YES
(11) $\sum_{n=0}^{\infty} \frac{3^{2n}}{(2n)!}$	YES	YES
(12) $\sum_{n=1}^{\infty} \frac{(-1)^{n} 2^{2n+1}}{(2n+1)!}$	YES	YES
(13) $\sum_{n=0}^{\infty} \frac{(-1)^{n} \pi^{2n}}{(2n)!}$	YES	YES
(14) $\sum_{n=14}^{\infty} \frac{(-2)^{n}}{\sqrt{n+1}}$	NO	NO
(15) $\sum_{n=1}^{\infty} \frac{(-1)^{n}(n+1)}{2n-1}$	NO	NO
(16) $\sum_{n=2}^{\infty} \frac{1-n}{2n^2}$	NO	NO