

10. [8 points] Determine whether the following series converges or diverges. If it converges, determine if it is absolute or conditional convergence **Circle your final answer choice.** Fully justify your answer including using proper notation and showing mechanics of any tests you use.

$$\sum_{n=1}^{\infty} \frac{(-1)^n (n^{1/2} + 4)}{3n^{3/2} + 2}$$

Circle one: **Absolutely Converges** **Conditionally Converges** **Diverges**