Sum of the Series

The nth partial sum is given. Find the infinite sum (S) of the series. Also determine whether the series converges or diverges.

1)
$$S_n = \frac{n^3 + 1}{n^2 + 1}$$

2)
$$S_n = \frac{5n^2 - n^3}{10 + 6n^3}$$

3)
$$S_n = \frac{0.8n}{n+1.7}$$

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5)
$$S_n = \frac{9n^4}{n+12}$$

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7)
$$S_n = \frac{-8n + 9}{3 + n}$$

8)
$$S_n = 15n - \frac{n^2}{n^4 + 11}$$