Polynomials: Adding and Subtracting

Simplify

26. A local deli kept track of the sandwiches it sold for three months. The polynomials below model the number of sandwiches sold, where s represents days.

$$\text{Ham and Cheese:} \quad 4s^3 - 28s^2 + 33s + 250$$
$$\text{Pastrami:} \quad -7.4s^2 + 32s + 180$$

Write a polynomial that models the total number of these sandwiches that were sold.

Simplify.

27.
$$11n - 4$$
$$-(5n + 2)$$

28.
$$7x^4 + 9$$
$$-(8x^4 + 2)$$

29.
$$3d^2 + 8d - 2$$
$$-(2d^2 - 7d + 6)$$

30. $(28e^3 + 3e^2) + (19e^3 + e^2)$

31. $(-12h^4 + h) - (-6h^4 + 3h^2 - 4h)$

32. A small town wants to compare the number of students enrolled in public and private schools. The polynomials below show the enrollment for each:

$$\text{Public School:} \quad -19c^2 + 980c + 48{,}989$$
$$\text{Private School:} \quad 40c + 4046$$

Write a polynomial for how many more students are enrolled in public school than private school.