

**Practice**

For use with pages 656-661

Find the difference.

12.  $(15m^2 + 2m - 9) - (-m^2 - 12m - 6)$

13.  $(11t^2 - 8t - 19) - (20t^2 + 3t + 10)$

14.  $(4b^3 - 7b - 7) - (b^2 + 6b - 12)$

15.  $(-x^2 - 5x + 9) - (2x^3 + 8x - 13)$

16.  $(15h^4 + 14) - (3h^4 - 4)$

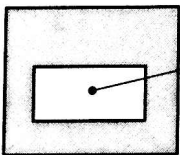
17.  $(3n^4 + 6n + 1) - (9n^4 + 7n^2 - 18)$

18.  $(0.7a^2 - 1.8a + 1.4) - (5.6a^2 - 1.2a + 3.7)$

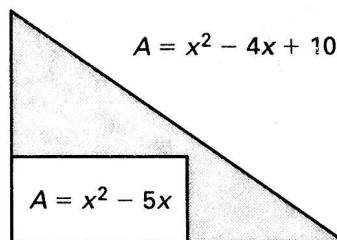
19.  $(-2.4z^2 + 9.4z - 0.6) - (9.1z^2 + 6.5z - 4.2)$

Write an expression to represent the area of the shaded region given the total area and the area of the unshaded region.

20.  $A = 3x^2 + 9$



21.



22. The number of people in the U.S. employed by the railroad transportation industry during the years 1997-2001 is approximated by the polynomial  $-0.83x^3 + 20.4x^2 - 162x + 650$ , where  $x$  is the year with  $x = 7$  corresponding to 1997. The number of people in the U.S. employed by the railroad and water transportation industries combined is approximated by the polynomial  $-1.33x^3 + 35.0x^2 - 295x + 1220$ . Write a polynomial that gives the number of people in the U.S. employed by the water transportation industry.