Solving polynomial equations (continued)

Solve.

a) $x(x+4)^2(2x-5)^3 = 0$

.

b) $9x^4 + 2x^2 + 4 = 3 - 4x^2$

Solve.

c) $7x^5 - 30x^3 + 8x = 0$

d) $100x^4 = 64x^2$

Solve.

e) $(5x+4)(2x^2+x-5)=0$

f) $2x^3-11=x^3+16$

Solve.

g) $4x^3 - 12x^2 = 27 - 9x$

h) $x^6 + 64 = 0$

Write a polynomia equation in standard form with integral coefficients given the roots.

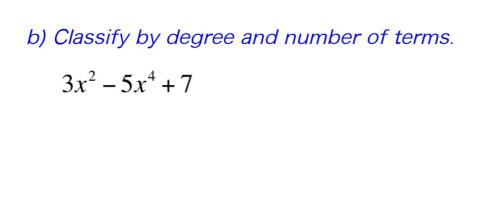*a)* $0, -3, 5$

b) $2, \sqrt{5}, -\sqrt{5}$

Write a polynomial equation in standard form with integral coefficients given the roots.
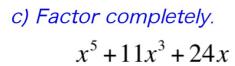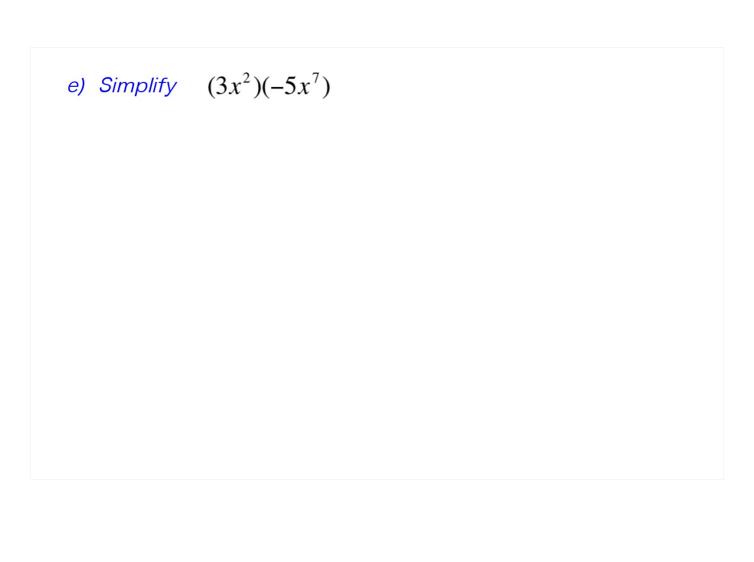
c) $1, 2i, -2i$

d) *3, -4 (mult of 2)*

Review

a) Perform the indicated operation. Write in standard form.

$$(5 - 2x^3 - 4x + x^2) - (5x^2 - 8 + 2x)$$

b) Classify by degree and number of terms.

$$3x^2 - 5x^4 + 7$$

c) Factor completely.

$$x^5 + 11x^3 + 24x$$

d) Factor completely. $\quad x^6 + 3x^3 - 4$

e) Simplify $(3x^2)(-5x^7)$

f) Simplify $\dfrac{2x^2}{\left(4x^{-3}\right)^2}$