

MCT 4CI 3.3.2: Solving Practice for Cubic and Quartic Equations

Date: _____

1. Solve. Factor and use the quadratic formula where needed.

a) $2x^4 - 20x^3 - 48x^2 = 0$

b) $2x^4 - 50x^2 = 0$

c) $16x^3 - 12x^2 - 18x = 0$

d) $x^3 - x^2 - 4x + 4 = 0$

e) $-4x^3 + 10x^2 - 2x = 0$

f) $x^4 + 4x^3 + 5x^2 = 0$

g) $0 = x^4 + x^2$

h) $x^3 - 14 = 0$

Answers

a) 0, 12, -2

b) 0, 5, -5

c) $0, \frac{-3}{4}, \frac{3}{2}$

d) 1, 2, -2

e) 0, 2.28, 0.219

f) 0

g) 0

h) 2.41