

R.4 Group Work
Honors Algebra 2 with Trig

1. Factor the following:

a. $10ab - 6b + 35a - 21$

d. $36z^2 - 81y^4$

b. $8r^3 - 64r^2 + r - 8$

e. $a^3 + 64$

c. $16q^2 - 25$

f. $27c^3 - 8$

Novel Problem Solving:

1. Factor the following:

a. $x^2 + 4x - a^2 + 4$

b. $x^6 - 2x^5 + 2x^4 - 4x^3 + x^2 + 2$

c. $x^4 - 2x^2y^2 + y^4 - y^2$

e. $x^3 + 3x^2 + 3x + 1$

d. $x^4 - 6x^2y^2 + y^4$

2. The quadratic function $f(x) = 2x^2 - 24x + c$ has two real zeros that differ by 18. Find the value of c . (NCTM Dec 2015 #29)

3. Create your own novel problem with answer key! If others in your group or around the room complete their own as well we will swap problems and try them out.