Geometry 1 - Mr. C. - All work on looseleaf. Name_____

Q1HW2

Date_____ Period____

Evaluate.

1) $j + \frac{1}{3k}$; use $j = 1\frac{4}{5}$, and $k = \frac{3}{4}$

2) $a - \left(\frac{1}{c}\right)^2$; use $a = 2$, and $c = 3\frac{1}{3}$

3) $(6r^3 - 3r) + (r^3 - 4r + 6)$

4) $(8m - 2)(3m^2 - 6m - 5)$

Factor completely.

5) $x^2 - x - 6 = 0$

6) $x^2 + 2x - 8 = 0$

7) $x^2 - x - 20 = 0$

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

9) $2x^2 + 7x + 6 = 0$

10) $2x^2 - 3x - 5 = 0$

11) $2x^2 - 11x + 15 = 0$

12) $5x^2 - 2x - 3 = 0$

13) $5x^2 + 14x + 8 = 0$

14) $3x^2 - x - 10 = 0$

Solve each equation by factoring.

15) $3p^2 + 20p - 7 = 0$

16) $3x^2 + 11x + 10 = 0$

17) $98n^2 - 371n + 98 = 0$

18) $125m^2 - 125m - 30 = 0$

Find the value of the discriminant of each quadratic equation.

19) $-2v^2 + 2v + 4 = 0$

20) $-5x^2 + x + 8 = 0$