Handout 3 Math 114

Skills Test Practice

Solve the following algebraically without a calculator.

1)
$$4(3x + 1) - 2(3x - 2) = 15$$

2)
$$\frac{3}{4}(r+3) - \frac{1}{8}(3r+2) = \frac{1}{2}r$$

3)
$$\sqrt{3t+4}+t=8$$

4)
$$\sqrt[3]{q^2 + 2q} - 2 = 0$$

5)
$$\frac{6p-12}{p+3} + \frac{5}{p-2} = 6$$

6)
$$\frac{1}{y^2+3y+2} + \frac{1}{y-1} = \frac{2}{y^2-1}$$

7)
$$(x-1)^2 - 5 = 4$$

8)
$$3(2c-7)^2 = 15$$

9)
$$2z^2 = 2z + 1$$

$$10)\,2z^2 = 2z - 1$$

11)
$$A = \frac{b}{b-c}$$
, solve for b

12)
$$2p = 3pc + f$$
, solve for p

13)
$$gf + 3g = 4f - 6gf$$
, solve for f .