Simplifying Rational Expressions Quiz /18

Show all your work in a clear, easy to follow manner, for full marks. All answers must be written in simplest form.

1. Simplify each expression **and** state any restrictions on the variable.

a) $\frac{15xy}{24x}$ b) $\frac{2x^{2}-8x}{4-x}$

c) $\frac{x(x+2)}{\left(x+2\right)(x+3)}$ d) $\frac{x^{2}+9x+18}{x^{2}+6x}$

e) $\frac{3x^{2}-10x-8}{x^{2}-16}$ f) $\frac{x^{2}-3xy+2y^{2}}{x^{2}-4y^{2}}$