Multiply Radicals

Multiplying a monomial by a monomial:
   Multiply the "outsides"
   Multiply the "insides"
   Simplify, if possible.

$(2\sqrt{3})(4\sqrt{15})$ $(2\sqrt{3y})(5\sqrt{2x})$

Multiply a square root by the SAME square root:

$(\sqrt{3})(\sqrt{3})$ $(\sqrt{7y})(\sqrt{7y})$ $(\sqrt{5-y})(\sqrt{5-y})$

Perform the indicated operations and simplify your answers:

> 1. F.O.I.L.
> 2. Simplify
> 3. Combine like terms.

1. $3\sqrt{5y}\left(\sqrt{5y} + \sqrt{x} - 2\sqrt{3}\right)$ 2. $(4\sqrt{2} - 2\sqrt{3})(5\sqrt{3} - 8\sqrt{6})$

3. $\left(3\sqrt{x} - 2\sqrt{y}\right)^2$ 4. $(5+\sqrt{x+3})^2$

5. $(2-3\sqrt{5x-1})^2$