

NSRWS-4

a) Simplify the following

$$a) \sqrt{2}(4\sqrt{3} - 2\sqrt{2}) = _ \sqrt{_} _ _$$

$$b) (4\sqrt{3} - 2\sqrt{2})(4\sqrt{3} - 2\sqrt{2})$$

$$= (_ \sqrt{_} - _ \sqrt{_})^2$$

$$= (_ \sqrt{_})^2 + (_ \sqrt{_})^2 - 2(_ \sqrt{_})(_ \sqrt{_})$$

$$= _ + _ - _ \sqrt{_}$$

$$= _ - _ \sqrt{_}$$

$$c) (3\sqrt{2} + 4\sqrt{3})(3\sqrt{2} + 4\sqrt{3})$$

$$= (_ \sqrt{_} + _ \sqrt{_})^2$$

$$= (_ \sqrt{_})^2 + (_ \sqrt{_})^2 + 2(_ \sqrt{_})(_ \sqrt{_})$$

$$= _ + _ + _ \sqrt{_}$$

$$= \quad - \quad + \quad - \sqrt{\quad}$$

$$Q4) (4\sqrt{3} - 2\sqrt{2}) (3\sqrt{2} + 4\sqrt{3})$$

$$= -\sqrt{\quad} (3\sqrt{2} + -\sqrt{\quad}) - -\sqrt{\quad} (-\sqrt{\quad} + 4\sqrt{3})$$

$$= -\sqrt{\quad} + \quad - \quad - \quad - \sqrt{\quad}$$

$$= -\sqrt{\quad} + \quad$$