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$$(a) \sin 40^\circ + \sin 30^\circ = 2 \sin \left( \frac{40^\circ + 30^\circ}{2} \right) \cos \left( \frac{40^\circ - 30^\circ}{2} \right) = 2 \sin 35^\circ \cos 5^\circ$$

$$(b) \cos 45^\circ + \cos 35^\circ = 2 \cos \left( \frac{45^\circ + 35^\circ}{2} \right) \cos \left( \frac{45^\circ - 35^\circ}{2} \right) = 2 \cos 40^\circ \cos 5^\circ$$