

## Assignment : Product to sum

Date \_\_\_\_\_

**Write each product as a sum or difference with positive arguments.**

1)  $3\sin 5B\cos 4B$

2)  $\sin 49\cos 9$

3)  $2\cos 13\sin 69$

4)  $3\cos 2A\cos 5A$

**Write each sum or difference as a product with positive arguments.**

5)  $3(\cos 50 - \cos 62)$

6)  $\sin 31 - \sin 195$

7)  $\cos 228 + \cos 34$

8)  $2(\cos 155 + \cos 69)$

**Write each sum or difference as a product.**

9)  $-4\cos 178 - 4\cos 114$

10)  $\cos 165 + \cos 83$

11)  $\sin 74 - \sin 100$

12)  $2\cos 152 + 2\cos 142$

## Answers to Assignment : Product to sum

1)  $\frac{3\sin 9B + 3\sin B}{2}$

2)  $\frac{\sin 58 + \sin 40}{2}$

3)  $\sin 82 + \sin 56$

4)  $\frac{3\cos 3A + 3\cos 7A}{2}$

5)  $6\sin 56\sin 6$

6)  $-2\cos 113\sin 82$

7)  $2\cos 131\cos 97$

8)  $4\cos 112\cos 43$

9)  $-8\cos 146\cos 32$

10)  $2\cos 124\cos 41$

11)  $2\cos 87\sin -13$

12)  $4\cos 147\cos 5$

