Name _____ Date _____

Year Group _____

Express as a product

1. $\sin(5x) - \sin(2x)$

Steps => $2 * \cos\left(\frac{\_\_\_ + \_\_\_}{2}\right) * \sin\left(\frac{\_\_\_ + \_\_\_}{2}\right)$

Answer = ___ $2 * \cos\left(\frac{\_\_\_}{2}\right) * \sin\left(\frac{\_\_\_}{2}\right)$

2. $\sin(9w) + \sin(11w)$

Steps => $2 * \sin\left(\frac{\_\_\_ + \_\_\_}{2}\right) * \cos\left(\frac{\_\_\_ - \_\_\_}{2}\right)$

Answer = ___ $2 * \sin(\_\_\_\_) * \cos(\_\_\_\_)$

Express as a sum or difference

3. $\cos(2t)\sin(3t)$

Steps => $\frac{1}{2} * [\sin(\_\_\_\_ + \_\_\_\_) - \sin(\_\_\_\_ - \_\_\_\_)]$

Answer = $\frac{1}{2} * [\_\_\_ \sin(\_\_\_\_) \_\_\_ \sin(\_\_\_\_)]$

4. $\sin(-4m)\cos(2m)$

Steps => $\frac{1}{2} * [\sin(\_\_\_\_ + \_\_\_\_) + \sin(\_\_\_\_ - \_\_\_\_)]$

Answer = $\frac{1}{2} * [\_\_\_ \sin(\_\_\_\_) \_\_\_ \sin(\_\_\_\_)]$