**5F Small Angle Approximations**

1. When $θ$ is small, find the approximate value of:

$$\frac{sin2θ+tanθ }{2θ}$$

1. When $θ$ is small, find the approximate value of:

$$\frac{cos4θ-1}{θsin2θ}$$

1. Show that, when $θ$ is small:

$$sin5θ+tan2θ-cos2θ≈2θ^{2}+7θ-1$$

1. Hence, state the approximate value of $sin5θ+tan2θ-cos2θ$ for small values of $θ$