

4 Using small angle approximations, show that for small, non-zero, values of  $x$

$$\frac{x \tan 5x}{\cos 4x - 1} \approx A$$

where  $A$  is a constant to be determined.

**[4 marks]**

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

