1 (a) A geometric progression starts 4 16

Work out the next term.

[1 mark]

Answer _____

2 The first three terms of a geometric progression are $\frac{2}{3}$ $\frac{4}{9}$ $\frac{8}{27}$

Circle the fourth term.

[1 mark]

$\frac{10}{81}$ $\frac{14}{81}$ $\frac{16}{81}$ $\frac{32}{81}$

3 A is an **arithmetic** progression.

Here are the first four terms.

13 16 19 22

G is a **geometric** progression.

Here are the first four terms.

2 4 8 16

nth term of A = 8th term of G

Work out the value of n.

[4 marks]

$n =$ _____

4 (a) The first three terms of a geometric progression are $\frac{\sqrt{5}}{2}$ $\frac{5}{4}$ $\frac{5\sqrt{5}}{8}$

Work out the next term.

[1 mark]

Answer _____

4 (b) The nth term of a sequence is $(2+\sqrt{3})^n$

Show that the third term is $26 + 15\sqrt{3}$

[3 marks]