1. The nth term of a number sequence is given by $3n - 1$.

   Is 110 a term of this number sequence?

   Explain how you get your answer.

1. . . . .

2. The nth term of an arithmetic sequence is given by $3n + 2$.

   Is 105 a term of this sequence?

   Explain how you get your answer.

2. . . . .

3. The nth term of a number sequence is given by $7n + 1$.

   Is 106 a term of this number sequence?

   Explain how you get your answer.

<div align="right">3. ．．．．．．．．．．．．</div>

4. The nth term of a number sequence is given by $4n - 2$.

   Is 112 a term of this number sequence?

   Show how you get your answer.

<div align="right">4. . . . .</div>

Answers

1. yes because e.g. attempt to solve $3n - 1 = 110$, algebraically or trial and improvement and an argument e.g. shows $n = 37$ gives 110

2. no because e.g. attempt to solve $3n + 2 = 105$, algebraically or trial and improvement and an argument e.g. shows $n = 34$ gives 104 not 105

3. yes because e.g. attempt to solve $7n + 1 = 106$, algebraically or trial and improvement and an argument e.g. shows $n = 15$ gives 106

4. no because e.g. attempt to solve $4n - 2 = 112$, algebraically or trial and improvement and an argument e.g. shows $n = 28$ gives 110 not 112