Arithmetic progression word problems for Grade 10

Practice worksheet - Maths · Grade 10

Name: _____ Date: _____

Show your working. Answers are not included in this copy.

Try each task before opening its answer. Give an example or reason, not only a label.

Write an answer and your reason before opening the explanation. Check the reasoning as well as the final answer.

1. Is 4, 9, 14, 19 an AP? State d.

2. Is 2, 4, 8, 16 an AP?

3. Find term 8 when a = 3 and d = 4.

4. Find term 6 of 25, 22, 19, ...

5. Which term of 2, 5, 8, ... is 29?

6. Is 30 a term of the arithmetic progression 2, 5, 8, ...? Explain.

7. Find the sum of 1 through 10.

8. Find the sum of the first five terms of 4, 7, 10, ...

Practice continued

9. Can an AP have d = 0?

10. Does a_{12} mean the total of twelve terms?

11. Save ₹20 on day 1, then ₹2 more per day. Find day 5's deposit.

12. Save ₹20 on day 1 and ₹2 more each following day. Find the total saved over the first five days.

13. An initial height is 10 cm at week 0, increasing 3 cm weekly. Height after four weeks?

14. Why does the nth-term formula use n − 1?