

Math Domain

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|---|--------------------------------------|-----------------------------------|
| <input checked="" type="checkbox"/> Number/Quantity | <input type="checkbox"/> Shape/Space | <input type="checkbox"/> Function |
| <input type="checkbox"/> Chance/Data | <input type="checkbox"/> Arrangement | |

Math Actions (possible weights: 0 through 4)

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|--|--|
| <input type="checkbox"/> 2 Modeling/Formulating | <input type="checkbox"/> 2 Manipulating/Transforming |
| <input type="checkbox"/> 2 Inferring/Drawing Conclusions | <input type="checkbox"/> 2 Communicating |

Math Big Ideas

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|--|---|--|
| <input type="checkbox"/> Scale | <input type="checkbox"/> Reference Frame | <input checked="" type="checkbox"/> Representation |
| <input type="checkbox"/> Continuity | <input type="checkbox"/> Boundedness | <input type="checkbox"/> Invariance/Symmetry |
| <input type="checkbox"/> Equivalence | <input type="checkbox"/> General/Particular | <input type="checkbox"/> Contradiction |
| <input type="checkbox"/> Use of Limits | <input type="checkbox"/> Approximation | <input type="checkbox"/> Other |

A second grade student is likely to draw a diagram, similar to the one given in the problem, that includes all three of the antelope's jumps. Each of antelope's jumps is $7 + 3 = 10$ meters, so three jumps measure $10 + 10 + 10 = 30$ meters.

The second part of the diagram might include the leopard jumping to the 7 meter, 14 meter, 21 meter, 28 meter and 35 meter marks. To catch the antelope, the leopard needs to get slightly further than four jumps (28 meters), so the leopard needs five jumps to catch up.

The problem can also be solved numerically with similar computations or by subtracting 7 meters repeatedly from 30 meters until the fifth subtraction when the remaining quantity is too small to subtract successfully. That is,

- $30 - 7 = 23$ First jump
 $23 - 7 = 16$ Second jump
 $16 - 7 = 9$ Third jump
 $9 - 7 = 2$ Fourth jump
2 meters Fifth jump (not full 7 meters)

If the answer is obtained numerically, a diagram may follow the computations.

	partial level (1 or 2)	full level (3)
Modeling/ Formulating (weight: 2)	Make a diagram that reflects the conditions of the problem.	Make a diagram that helps the computations, or reports the results of the computations graphically.
Transforming/ Manipulating (weight: 2)	Complete some of the computations correctly.	Complete all computations correctly.
Inferring/ Drawing Conclusions (weight: 2)	Conclude that the antelope's leap is 10 meters. Develop a local strategy for finding the number of leopard leaps.	Develop a general strategy for finding the number of leopard leaps. Conclude that at least one of the necessary leaps will be shorter than maximum, but that it must be counted in the total.
Communicating (weight: 2)	Report only the answer and partial computations and diagrams.	Provide the diagram, computations and explanations to show the solution path.