

# Pre-Algebra Scoring Rubric for *Ostrich Llama Count*

For each category, choose the level that *best describes* the student's work

	Novice	Apprentice	Practitioner	Expert
<b>Problem Solving</b>				
<b>Interpretation</b>	does none or one of the things listed under Practitioner	does two of the things listed under Practitioner	understands the sum of the ostriches and llamas is given  recognizes that llamas have 4 legs & ostriches have 2 legs  attempts to determine the individual number of llamas and ostriches	there is no Extra on this problem, so there is no way to achieve Expert in this category
<b>Strategy</b>	does not have any ideas about how to solve the problem	has some ideas about how to solve the problem, but isn't quite there	has a strategy that relies on skill, not luck  for this problem, students may use guess and check OR logical reasoning OR algebraic reasoning OR formal algebra	uses algebra or uses two different methods
<b>Accuracy</b>	has made many errors	makes a few errors that lead to an incorrect answer	makes no arithmetic mistakes that really matter  writes equations correctly if algebra is used	[not normally available for this category]
<b>Communication</b>				
<b>Completeness</b>	has written nothing that tells you how they found their answer	shows work without an explanation <i>or</i> explains everything without showing the numbers  doesn't include enough information for another student to follow	attempts to explain all of the steps taken to solve the problem, which might include: <ul style="list-style-type: none"> <li>all of the guesses they made, how they tested them, and how that helped them make their next guess</li> <li>how they know they've met both conditions (the # of heads, the # of legs)</li> </ul>	adds in useful extensions and further explanation of some of the ideas involved
<b>Clarity</b>	explanation is very difficult to read and follow	another student wouldn't be able to follow their explanation entirely  long and written in one paragraph lots of spelling errors/typos	explains all of the steps mentioned in such a way that another student would understand  makes an effort to check their formatting, spelling, and typing (a few errors are fine)	formats things exceptionally clearly  answer is very readable and appealing
<b>Reflection</b>	<i>The items in the columns to the right are considered reflective, and could be in the solution or the comment they leave after viewing our answer:</i>	checks their answer (not the same as viewing our "answer check")  reflects on the reasonableness of their answer	connects the problem to prior knowledge or experience  explains where they're stuck  summarizes the process they used	comments on and explains the ease or difficulty of the problem  <b>revising their answer and improving anything</b>
	does nothing reflective	does one reflective thing	does two reflective things	does three or more reflective things or an great job with two