

<p>2(4) Number and operations. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy.</p>	<p>2(4)(A) The student is expected to recall basic facts to add and subtract within 20 with automaticity.</p>
<p>Materials</p> <ul style="list-style-type: none"> None needed. 	
<p>Procedure: Ask the student apply basic facts to solve the following word problems.</p> <ol style="list-style-type: none"> Jack had 7 books on the bookshelf. He put 8 more books on the bookshelf this morning. How many books are on Jack’s bookshelf? Maria had 18 pencils. She gave 9 pencils to her teacher. How many pencils does Maria still have? There were 14 children on the bus. Some children got off the bus at the first stop. Now there are 6 children on the bus. How many children got off the bus at the first bus stop? There were some cars in the parking lot. Five more cars pulled in. Now there are 11 cars in the parking lot. How many cars were in the parking lot at the start? 	
<p>Check Student’s Responses:</p>	<p>Check Student’s Strategies:</p>
<ol style="list-style-type: none"> <input type="checkbox"/> Correct <input type="checkbox"/> Incorrect: _____ <input type="checkbox"/> Correct <input type="checkbox"/> Incorrect: _____ <input type="checkbox"/> Correct <input type="checkbox"/> Incorrect: _____ <input type="checkbox"/> Correct <input type="checkbox"/> Incorrect: _____ 	<ol style="list-style-type: none"> <input type="checkbox"/> Automaticity <input type="checkbox"/> Other: <input type="checkbox"/> Automaticity <input type="checkbox"/> Other: <input type="checkbox"/> Automaticity <input type="checkbox"/> Other: <input type="checkbox"/> Automaticity <input type="checkbox"/> Other:
<p>Notes:</p>	

<p>2(4)(A) The student is expected to recall basic facts to add and subtract within 20 with automaticity.</p>	<p>Possible interpretations, issues to follow up on, and implications for teaching</p>
<p>What did you observe?</p> <ul style="list-style-type: none"> • The student correctly solved the problems with automaticity. This student is likely to interpret and solve other one-step problems successfully. The student is most likely ready to begin solving multi-step problems with larger numbers. • The student incorrectly solved some of the problems. It is important to assess whether the student is struggling with the mathematics, the interpretation of the story problem, or computation. If the student correctly solved question one and question two, the student might struggle applying his or her understanding to problems that may be solved using either addition or subtraction such as question three and question four. <p><i>A teaching strategy might include asking the student to solve additional problems where the unknown is located in various positions. For example:</i></p> <ul style="list-style-type: none"> • <i>There were 6 flowers in the vase. Ms. Jones places some more in the vase. Now there are 12 flowers in the vase. How many flowers did Ms. Jones place in the vase?</i> • <i>There were some people in the park. Four people went home. Now there are 8 people in the park. How many people were in the park at the start?</i> <p><i>To gain additional insight, ask the student to justify his or her answer and/or explain how they arrived at the solution.</i></p> <ul style="list-style-type: none"> • The student incorrectly solved most of the problems and/or was not able to solve the problems with automaticity. It is important to determine the strategy(s) used to determine the solution. Consider whether the student used a counting strategy or used his or her fingers. <p><i>A teaching strategy might be to include providing the student with more efficient fact strategies such as making a ten. It may be necessary to use counters and ten-frames to help the student visualize the make ten strategy.</i></p>	