

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Rita gets paid \$16 per hour for the first 8 hours she works each day. She earns  $1\frac{1}{2}$  times per hourly pay rate for time she works over 8 hours each day. Rita's work day for Monday is described in the list.

- worked from 8:15 a.m. to 12:45 p.m.
- took a 45-minute lunch break
- worked until 6:15 p.m.

Rita does not get paid for her lunch break.

How much money did Rita earn for the time she worked on Monday? Show or explain all of the steps you use to determine your answer.



Enter your answer and explanation in the space provided.

## ANSWER KEY

| Rubric   |  |
|----------|--|
| Score    | Description  |
| <b>3</b> | <p>Student response includes the following 3 elements.</p> <ul style="list-style-type: none"> <li>• Computation component = 1 point                             <ul style="list-style-type: none"> <li>○ Correctly calculates how much money was earned on Monday: \$158</li> </ul> </li> <li>• Modeling component = 2 points                             <ul style="list-style-type: none"> <li>○ Correctly models a process for determining the total number of hours worked</li> </ul> </li> </ul> <p>Note: It is not necessary to show the total hours of 9.25 if the two correct subtotals are given.</p> <ul style="list-style-type: none"> <li>○ Correctly models a process for determining the total dollar amount earned, including overtime</li> </ul> <p>Sample Student Response</p> <p>Rita worked from 8:15 a.m. to 12:45 p.m., or 4 ½ hours before lunch. She worked from 1:40 p.m. to 6:15 p.m., or 4 ¾ hours after lunch. The total time Rita worked on Monday was <math>4\frac{1}{2} + 4\frac{3}{4} = 9\frac{1}{4}</math> hours.</p> <p>Rita worked 1 ¼ hours beyond 8 hours, so she is paid overtime for that time. Rita is paid \$16 per hour for the first 8 hours she worked and <math>(\\$16)(1\frac{1}{2}) = \\$24</math> per hour for the 1 ¼ overtime she worked. The total dollar amount she earned on Monday is <math>\\$16(8) + \\$24(1\frac{1}{4}) = \\$128 + \\$30 = \\$158</math>.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• The student may receive a total of 2 modeling points if the modeling processes are correct but the student makes one or two computational errors resulting in an incorrect answer.</li> <li>• The student may receive a total of 1 modeling point if the modeling processes are correct but the student makes more than two computational errors resulting in an incorrect answer.</li> </ul> |
| <b>2</b> | Student response includes 2 of the 3 elements.   |
| <b>1</b> | Student response includes 1 of the 3 elements.   |
| <b>0</b> | Student response is incorrect or irrelevant.   |

| Glow | Grow |
|------|------|
|      |      |