Programming Logic - Beginning
152-101

Math Program Design Evaluation Form

<table>
<tr><td></td></tr>
<tr><td>Score _____ / 20</td></tr>
<tr><td>Update Value _____</td></tr>
<tr><td>Make all corrections and resubmit to earn update points</td></tr>
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☑ Update Recommended

IOP
- ☐ (½ point) Two inputs included
- ☐ (½ point) Inputs do not include verbs
- ☐ (½ point) Six outputs included
- ☐ (½ point) Outputs do not include verbs
- ☐ (½ point) Outputs include requirements to display entire equations
- ☐ (½ point) Processing includes getting inputs
- ☐ (½ point) Each result calculated
- ☐ (½ point) Processing includes displaying outputs
- ☐ (½ point) Variable names are appropriate (camelBack)

Screen Layout
- ☐ (½ point) Screen layout includes textboxes for two inputs
- ☐ (½ point) Inputs labeled properly
- ☐ (½ point) Layout includes labels for six outputs
- ☐ (½ point) Layout appearance is appropriate

TOE
- ☐ (½ point) Task list includes *getting* two inputs
- ☐ (½ point) Object names for inputs appropriate
- ☐ (½ point) Events for all inputs designated as None

- ☐ (½ point) Task list includes calculating six results
- ☐ (½ point) Object for all calculations is calculate button
- ☐ (½ point) Event for all calculation is Click (for calculate button)

- ☐ (½ point) Task list includes clearing the form
- ☐ (½ point) Object list for clearing form includes btnClear, all input fields, all output fields
- ☐ (½ point) Clear Object/Event is Clear button Click
- ☐ (½ point) Task list includes ending program
- ☐ (½ point) End program Object/Event is Exit button Click

- ☐ (½ point) Task list includes displaying all outputs
- ☐ (½ point) Objects for outputs named appropriately (labels)
- ☐ (½ point) Events for all outputs designated as Calculate button Click

Pseudocode

btnCalculate.Click
- ☐ (½ point)   Event name designated
- ☐ (½ point)   All inputs first transferred to variables
- ☐ (½ point)   Equation for sum correct
- ☐ (½ point)   Equation for difference correct
- ☐ (½ point)   Equation for product correct
- ☐ (½ point)   Equation for quotient correct
- ☐ (½ point)   Equation for integer quotient correct
- ☐ (½ point)   Equation for remainder correct
- ☐ (½ point)   Equation results transferred to labels
- ☐ (½ point)   Outputs include entire equation (n1, operator, n2, result)
- ☐ (½ point)   End statement included
- ☐ (½ point)   Statements between event name and End indented

btnClear.Click
- ☐ (½ point)   Event name designated
- ☐ (½ point)   Two textboxes cleared (inputs)
- ☐ (½ point)   Six output labels cleared
- ☐ (½ point)   End statement included
- ☐ (½ point)   Statements between event name and End indented

btnExit.Click
- ☐ (½ point)   Event name designated
- ☐ (½ point)   Command to close form included
- ☐ (½ point)   End statement included
- ☐ (½ point)   Statements between event name and End indented

Flowchart Update to reflect changes to pseudocode
- ☐ (½ point)   Flowchart logic matches pseudocode logic, line for line
- ☐ (½ point)   Correct terminal symbols used
- ☐ (½ point)   Correct symbols used when transferring inputs to variables
- ☐ (½ point)   Correct symbols used for calculations
- ☐ (½ point)   Correct symbols used for transferring outputs to labels
- ☐ (½ point)   Correct symbols used for clearing objects
- ☐ (½ point)   Correct symbol used for closing form

Test Plan
- ☐ (½ point)   Test plan includes five sets of sample inputs
- ☐ (½ point)   Anticipated equations provided for each set of sample data
- ☐ (½ point)   Anticipated results provided for each set of sample data
- ☐ (½ point)   Test plan includes one instance where number 1 is 0
- ☐ (½ point)   Test plan includes at least one negative value
- ☐ (½ point)   One input that causes error included
- ☐ (½ point)   Sample data varied enough to test program