| Test Cases | | |
| --- | --- | --- |
| **For specification(s)…** | **Input (button sequences)** | **Expected Output (in calculator's label)** |
| A1 | **C12** | **12** |
| A1 | **C12.5** | **12.5** |
| A1, D | **C12.5±** | **-12.5** |
| A1, D | **C12.5±±** | **12.5** |
| B1 | **C6×6=** | **36** |
| B1 | **C4.5×9=** | **40.5** |
| B1 | **C±5×6=** | **-30** |
| B1, D | **C±5×6=±** | **30** |
| B1, D | **C±5×6=±±** | **-30** |
| B2 | **C15**÷**3=** | **5** |
| B2 | **C60**÷**2=** | **30** |
| B2 | **C1**÷**6=** | **0.166667** (to limit of label) |
| B3 | **C5+5=** | **10** |
| B4 | **C80-20=** | **60** |
| B4, D | **C±80-20=** | **-100** |
| B5 | **C20%=** | **0.2** |
| C1 | **C6×6=×7=** | **252** |
| C2 | **C40÷2=÷5=** | **4** |
| C3 | **C20+5=+7=** | **32** |
| C4 | **C30-10= -8=** | **12** |
| C5 | **C100-50=%=** | **0.5** |
| D | **C40%=** | **0.4** |
| E | **C30.7+17.9=** ÷ 2.6= %= | **0.186923** |

## Implementation Plan (Inquiry)

*Complete the plan to separate concerns (user interface in the view, state kept in the model, connect logic in controller).*

|  |  |  |  |
| --- | --- | --- | --- |
| **Required Outlets?** | **Required Actions?** | **What State should the model track?** | **What functions does the model need?** |
| labelDisplay | *zeroPressed* | computedValue : Double | addToNewValue(digit : string) |
|  | *onePressed* | providedValue : String? | multiply |
|  | *twoPressed* | operation : Operation? | divide |
|  | *threePressed* |  | updateState |
|  | *fourPressed* |  | equals |
|  | *fivePressed* |  | makeProvidedValueComletedValue |
|  | *sixPressed* |  | clear |
|  | *sevenPressed* |  | yv |
|  | *eightPressed* |  |  |
|  | *ninePressed* |  |  |
|  | *decimal* |  |  |
|  | *multiply* |  |  |
|  | *equals* |  |  |
|  | *divide* |  |  |
|  | *addition* |  |  |
|  | *subtraction* |  |  |
|  | *clear* |  |  |
|  | *percentage* |  |  |
|  | *Plusminus* |  |  |