Simple calculation with formula field

Here is a simple demo to show how the formula fields can be used

We have 2 types of fields for calculations:

- Calculated - which is calculated ONLY when the record is created
- Formula - which is calculated and re-calculated each time the record is saved (created or updated)

You can use any of the functions or operations documented here: Supported math operators, formulas and functions

There is also a way to do calculations with ConfiForms Field Definition Rules

- Page to demo score calculation using 2 methods
- Using ConfiForms Rule for Field Definition to calculate the sums online

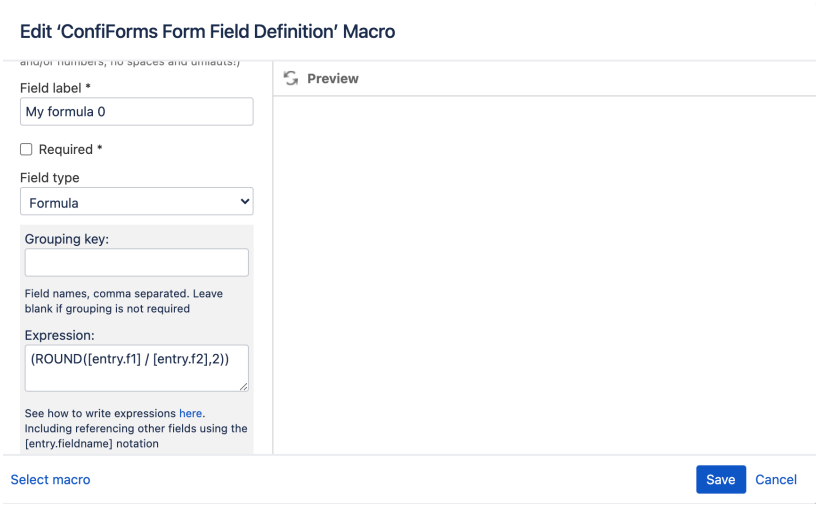
Here we have a simple form with 4 fields:

2 of number types and 3 of formula types

We have the following formulas in this form:

- ([entry.f1] + [entry.f2])
- (ROUND([entry.f1] / [entry.f2],2))
- CONCAT("Some random: ", ((RANDOM() + [entry.f1] - [entry.f2] + NOW())))

Example configuration of a formula field:



f1 *

f2 *

Save and Calculate

Stored data

f1	f2	My formula 0	My formula 1	My formula 2

2	2	1	4	Some random: 1711724147837.680
1	2	0.5	3	Some random: 1711724147841.437
1	1	1	2	Some random: 1711724147843.404
1	2	0.5	3	Some random: 1711724147843.051
4	4	1	8	Some random: 1711724147844.680
4	4	1	8	Some random: 1711724147845.639
7	8	0.88	15	Some random: 1711724147845.185
1	2	0.5	3	Some random: 1711724147845.837
8	9	0.89	17	Some random: 1711724147846.919
4	5	0.8	9	Some random: 1711724147846.273
100	1	100	101	Some random: 1711724147947.643
100	1	100	101	Some random: 1711724147948.173
2	3	0.67	5	Some random: 1711724147849.806
1	1	1	2	Some random: 1711724147850.367
1	2	0.5	3	Some random: 1711724147850.419
10	10	1	20	Some random: 1711724147852.358
1	2	0.5	3	Some random: 1711724147851.592
1	1	1	2	Some random: 1711724147853.474
100	50	2	150	Some random: 1711724147904.921
1	2	0.5	3	Some random: 1711724147853.623
11	13	0.85	24	Some random: 1711724147853.086
23	44	0.52	67	Some random: 1711724147834.347
1	2	0.5	3	Some random: 1711724147855.257
1	3	0.33	4	Some random: 1711724147855.176
5	5	1	10	Some random: 1711724147857.575
20	20	1	40	Some random: 1711724147858.380
1	1	1	2	Some random: 1711724147859.876
1	2	0.5	3	Some random: 1711724147858.250
1	3	0.33	4	Some random: 1711724147858.207
1	2	0.5	3	Some random: 1711724147859.821
5	5	1	10	Some random: 1711724147861.734
10	2	5	12	Some random: 1711724147870.260
2	2	1	4	Some random: 1711724147863.600
5	4	1.25	9	Some random: 1711724147864.928

3	2	1.5	5	Some random: 1711724147865.639
1	2	0.5	3	Some random: 1711724147864.917
2	2	1	4	Some random: 1711724147865.803
5	5	1	10	Some random: 1711724147866.687
3	3	1	6	Some random: 1711724147866.621
22	100	0.22	122	Some random: 1711724147789.421
3	3	1	6	Some random: 1711724147867.018
1	2	0.5	3	Some random: 1711724147867.218
1	1	1	2	Some random: 1711724147868.773
1	0	0	1	Some random: 1711724147870.917
1	2	0.5	3	Some random: 1711724147868.698
1	1	1	2	Some random: 1711724147870.697
33	33	1	66	Some random: 1711724147870.062
545	556	0.98	1101	Some random: 1711724147863.007
545	556	0.98	1101	Some random: 1711724147864.724
3	6	0.5	9	Some random: 1711724147872.504
1	2	0.5	3	Some random: 1711724147875.007
20	10	2	30	Some random: 1711724147886.435
12	12	1	24	Some random: 1711724147877.377
7	5	1.4	12	Some random: 1711724147879.292
11	14	0.79	25	Some random: 1711724147875.972
1	2	0.5	3	Some random: 1711724147877.033
2	2	1	4	Some random: 1711724147879.716
1	2	0.5	3	Some random: 1711724147878.853
24	1	24	25	Some random: 1711724147902.046
13	13	1	26	Some random: 1711724147880.638
100	10	10	110	Some random: 1711724147970.822
2	2	1	4	Some random: 1711724147881.979
5	0	0	5	Some random: 1711724147886.148
0	1	0	1	Some random: 1711724147882.945
5	5	1	10	Some random: 1711724147883.042
2	2	1	4	Some random: 1711724147884.012
-2	2	-1	0	Some random: 1711724147881.021
8	9	0.89	17	Some random: 1711724147885.239

15	1	15	16	Some random: 1711724147900.062
1	1	1	2	Some random: 1711724147887.379
1	1	1	2	Some random: 1711724147887.259
1	1	1	2	Some random: 1711724147888.491
1	2	0.5	3	Some random: 1711724147887.107
45	5	9	50	Some random: 1711724147929.248
2	2	1	4	Some random: 1711724147889.371
2	2	1	4	Some random: 1711724147889.597
5	10	0.5	15	Some random: 1711724147885.056
3	2	1.5	5	Some random: 1711724147892.354
11	13	0.85	24	Some random: 1711724147889.137
22	22	1	44	Some random: 1711724147891.393
2	2	1	4	Some random: 1711724147892.594
1	2	0.5	3	Some random: 1711724147891.169
5	5	1	10	Some random: 1711724147893.218
6	125	0.05	131	Some random: 1711724147774.698
23	32 312	0	32335	Some random: 1711724115605.766
1	1	1	2	Some random: 1711724147894.850
1	2	0.5	3	Some random: 1711724147894.049
2	2	1	4	Some random: 1711724147895.781
100	200	0.5	300	Some random: 1711724147796.477
2	2	1	4	Some random: 1711724147896.812
3	5	0.6	8	Some random: 1711724147895.520
3	4	0.75	7	Some random: 1711724147897.598
1	2	0.5	3	Some random: 1711724147897.543
1	2	0.5	3	Some random: 1711724147898.358
5	8	0.62	13	Some random: 1711724147896.882
3	8	0.38	11	Some random: 1711724147894.599
1	1	1	2	Some random: 1711724147900.866
5	3	1.67	8	Some random: 1711724147902.512
10	5	2	15	Some random: 1711724147906.571
1	2	0.5	3	Some random: 1711724147900.153
2	2	1	4	Some random: 1711724147902.187
2	123	0.02	125	Some random: 1711724147781.124

480	60	8	540	Some random: 1711724148323.400
300	20	15	320	Some random: 1711724148183.435
123	321	0.38	444	Some random: 1711724147706.676
6	509	0.01	515	Some random: 1711724147401.308
10	5	2	15	Some random: 1711724147910.633
([entry.f1] + [entry.f2])	([entry.f1] + [entry.f2])	Expression: [(ROUND(([entry.f1] + [entry.f2]) / ([entry.f1] + [entry.f2]),2))] could not be calculated, Unknown operator '[' at position 9	Expression: [(([entry.f1] + [entry.f2]) + ([entry.f1] + [entry.f2]))] could not be calculated, Unknown operator '[' at position 3	Expression: [CONCAT("Some random: ", ((RANDOM() + ([entry.f1] + [entry.f2]) - ([entry.f1] + [entry.f2]) + NOW())))] could not be calculated, Unknown operator '[' at position 39
100	200	0.5	300	Some random: 1711724147810.131
3	4	0.75	7	Some random: 1711724147910.278
1	2	0.5	3	Some random: 1711724147910.523
3	3	1	6	Some random: 1711724147912.019
2	5	0.4	7	Some random: 1711724147910.489

Storage format for this demo:

```
<ac:structured-macro ac:macro-id="e44fca82-119b-4e79-b70a-1d521f0f13e3" ac:name="confiform" ac:schema-version="
1">
  <ac:parameter ac:name="formName">myform1</ac:parameter>
  <ac:rich-text-body>
    <ac:structured-macro ac:macro-id="9930843c-b7ee-493d-b93d-6c91cf13da7a" ac:name="confiform-entry-register"
ac:schema-version="1">
      <ac:parameter ac:name="embedded">true</ac:parameter>
      <ac:rich-text-body>
        <p>
          <br/>
        </p>
      </ac:rich-text-body>
    </ac:structured-macro>
    <p>
      <ac:structured-macro ac:macro-id="c1d112a1-145d-4822-9263-57e7f1d95202" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">f1</ac:parameter>
        <ac:parameter ac:name="fieldLabel">f1</ac:parameter>
        <ac:parameter ac:name="type">number</ac:parameter>
        <ac:parameter ac:name="required">true</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="5b285aed-c238-42cb-8fb0-74b504f51edd" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">f2</ac:parameter>
        <ac:parameter ac:name="fieldLabel">f2</ac:parameter>
        <ac:parameter ac:name="type">number</ac:parameter>
        <ac:parameter ac:name="required">true</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="9981f97b-d090-401d-95d2-b19d45a4df9f" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">myformula1</ac:parameter>
        <ac:parameter ac:name="fieldLabel">My formula 1</ac:parameter>
```

```
        <ac:parameter ac:name="extras">([entry.f1] + [entry.f2])</ac:parameter>
        <ac:parameter ac:name="type">formula</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="f6b5b3d7-3462-4068-b23c-2ccee3789f66" ac:name="confiform-field-
definition" ac:schema-version="1">
        <ac:parameter ac:name="fieldName">myformula2</ac:parameter>
        <ac:parameter ac:name="fieldLabel">My formula 2</ac:parameter>
        <ac:parameter ac:name="extras">CONCAT("Some random: ", ((RANDOM() + [entry.f1] - [entry.f2] + NOW())))<
/ac:parameter>
        <ac:parameter ac:name="type">formula</ac:parameter>
      </ac:structured-macro>
    </p>
  </ac:rich-text-body>
</ac:structured-macro>
<p>Stored data</p>
<ac:structured-macro ac:macro-id="1d573801-7d23-412f-aa1e-c3c04d1fcc63" ac:name="confiform-table" ac:schema-
version="1">
  <ac:parameter ac:name="formName">myform1</ac:parameter>
  <ac:rich-text-body>
    <p>
      <ac:structured-macro ac:macro-id="dc71204e-5341-4543-af04-45ab036c827d" ac:name="confiform-field" ac:
schema-version="1">
        <ac:parameter ac:name="fieldName">f1</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="12af5c9f-b5bb-475e-b9c1-470d60b3bd6c" ac:name="confiform-field" ac:
schema-version="1">
        <ac:parameter ac:name="fieldName">f2</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="0c76996a-654f-4b77-848b-9d8b2212a85f" ac:name="confiform-field" ac:
schema-version="1">
        <ac:parameter ac:name="fieldName">myformula1</ac:parameter>
      </ac:structured-macro>
    </p>
    <p>
      <ac:structured-macro ac:macro-id="9a8cf996-366b-4a8b-be43-da01d32dc449" ac:name="confiform-field" ac:
schema-version="1">
        <ac:parameter ac:name="fieldName">myformula2</ac:parameter>
      </ac:structured-macro>
    </p>
  </ac:rich-text-body>
</ac:structured-macro>
```