

<b>Build</b>		<b>1.0</b>		
<b>Environment</b>		<b>Android 11.0</b>		
<b>No</b>	<b>Description</b>	<b>Test data</b>	<b>Status</b>	<b>Comments</b>
<b>Addition</b>				
TC1	Integer positive numbers	345+892	passed	auto
TC2	Integer negative numbers	(-528)+(-634)	passed	auto
TC3	Integer positive and integer negative numbers	589+986+(-852)	passed	auto
TC4	Floating point positive numbers	125,8+652,13	passed	manual
TC5	Floating point negative numbers	(-526,75)+(-378,3)	passed	manual
TC6	Floating point positive and floating point negative numbers	753,54+436,753+(-753,29)	passed	manual
TC7	Integer positive and floating point positive numbers	456+698,58	passed	auto
TC8	Integer positive and floating point negative numbers	759897+(-52896,25)	passed	auto
TC9	Integer negative and floating point positive numbers	(-569)+258,36	passed	auto
TC10	Integer negative and floating point negative numbers	(-7569)+(-523,265)	passed	auto
<b>Subtraction</b>				
TC11	Integer positive numbers	7563-2563	passed	auto
TC12	Integer negative numbers	(-2563)-(-5523)	passed	auto
TC13	Integer positive and integer negative numbers	1589-986-(-852)	passed	auto
TC14	Floating point positive numbers	125,8-652,13	passed	manual
TC15	Floating point negative numbers	(-526,75)-(-378,3)	passed	manual
TC16	Floating point positive and floating point negative numbers	753,54-436,753-(-753,29)	passed	manual
TC17	Integer positive and floating point positive numbers	1456-698,58	passed	auto
TC18	Integer positive and floating point negative numbers	759897-(-52896,25)	passed	auto
TC19	Integer negative and floating point positive numbers	(-569)-258,36	passed	auto
TC20	Integer negative and floating point negative numbers	(-7569)-(-523,265)	passed	auto
<b>Multiplication</b>				
TC21	Integer positive numbers	345*892	passed	auto
TC22	Integer negative numbers	(-528)*(-634)	passed	auto
TC23	Integer positive and integer negative numbers	589*986*(-852)	passed	auto
TC24	Floating point positive numbers	125,8*652,13	passed	manual

TC25	Floating point negative numbers	$(-526,75)*(-378,3)$	passed	manual
TC26	Floating point positive and floating point negative numbers	$753,54*436,753*(-753,29)$	passed	manual
TC27	Integer positive and floating point positive numbers	$456*698,58$	passed	auto
TC28	Integer positive and floating point negative numbers	$759897*(-52896,25)$	passed	auto
TC29	Integer negative and floating point positive numbers	$(-569)*258,36$	passed	auto
TC30	Integer negative and floating point negative numbers	$(-7569)*(-523,265)$	passed	auto
TC31	Integer positive number to zero	$8*0$	passed	auto
TC32	Integer negative number to zero	$(-5)*0$	passed	auto
TC33	Floating point positive number to zero	$1,5*0$	passed	manual
TC34	Floating point negative number to zero	$(-5,2)*0$	passed	manual

#### Division

TC35	Integer positive numbers	$345/892$	passed	auto
TC36	Integer negative numbers	$(-528)/(-634)$	passed	auto
TC37	Integer positive and integer negative numbers	$589/(-852)$	passed	auto
TC38	Floating point positive numbers	$125,8/652,13$	passed	manual
TC39	Floating point negative numbers	$(-526,75)/(-378,3)$	passed	manual
TC40	Floating point positive and floating point negative numbers	$36,753/(-753,29)$	passed	manual
TC41	Integer positive and floating point positive numbers	$456/69,58$	passed	auto
TC42	Integer positive and floating point negative numbers	$759897/(-52896,25)$	passed	auto
TC43	Integer negative and floating point positive numbers	$(-569)/258,36$	passed	auto
TC44	Integer negative and floating point negative numbers	$(-7569)/(-523,265)$	passed	auto
TC45	Integer positive number to zero	$8/0$	passed	auto
TC46	Integer negative number to zero	$(-5)/0$	passed	auto
TC47	Floating point positive number to zero	$1,5/0$	passed	manual
TC48	Floating point negative number to zero	$(-5,2)/0$	passed	manual

#### Automation ROI calculation

Number of manuel Test Cases, pcs	16
Number of automated Test Cases, pcs	32
Period of ROI, hours (1 quarter = 13 weeks * 5 work days * 8 hours)	520

Hourly automation time per test, hours	1
<b>Automated test script development time</b>	4
Automated test execution time per test, hours	0,1
<b>Automated test script execution time</b>	92,44
Test Analysis time, hours	0,2
<b>Automated test analysis time</b>	13
Maintenance time, hours	0,35
<b>Automated test maintenance time</b>	22,75
Manual test execution time, hours	0,5
<b>Manual Execution Time</b>	520
<b>Investment</b>	652,19
<b>Saving</b>	1560
<b>Test automation ROI</b>	<b>139,19</b>

**Conclusion:**

Since ROI = 139,19%, this means that investments in automation will pay off within 1 quarter and even bring profit. Also once manual tester are freed from having to run repetitive tests. Automated testing will help expand test coverage, improve the quality and efficiency of testing.