

Timing of mathematical operations in c++

Me

1 Addition

Type	Mean	std.	Min	Max
uint8	20.3505	30.6503	18	20965
uint16	20.3452	29.4838	18	22693
uint32	20.3748	37.1641	18	28852
uint64	20.3386	29.2521	18	25953
int8	20.358	32.2083	18	25970
int16	20.7148	28.2929	18	29592
int32	20.3318	32.7493	18	22872
int64	20.3457	31.2435	18	21027
float	20.6591	33.2726	17	26427
double	20.3704	31.2554	18	21154

2 Subtaction

Type	Mean	std.	Min	Max
uint8	20.0623	34.3316	18	22129
uint16	20.0632	35.3186	17	21371
uint32	20.0733	37.2265	18	25832
uint64	20.2611	36.4267	17	28101
int8	20.2956	40.2497	18	24970
int16	20.3858	40.2166	18	43765
int32	20.0818	38.5911	18	26556
int64	20.1043	40.0682	18	26495
float	20.1965	34.035	17	22700
double	20.3674	35.574	18	21227

3 Multiplication

Type	Mean	std.	Min	Max
uint8	20.6667	37.3895	18	22272
uint16	20.349	31.9836	18	22768
uint32	20.3908	40.0424	18	20738
uint64	20.3952	38.8932	18	26508
int8	20.5434	37.3286	18	21388
int16	20.4105	35.2616	17	22903
int32	20.3664	33.2975	18	30505
int64	20.3635	36.1928	18	59341
float	20.6639	35.5782	18	22348
double	20.6338	30.306	18	26351

4 Division

Type	Mean	std.	Min	Max
uint8	23.3826	35.7728	21	21266
uint16	23.6961	40.0346	21	28740
uint32	23.6961	37.872	21	28479
uint64	29.6532	39.4209	21	21484
int8	23.6718	38.2057	21	28354
int16	23.682	35.9563	21	20845
int32	23.4893	38.5077	21	27053
int64	23.5523	38.1443	21	30251
float	20.6507	33.2094	18	22671
double	21.1816	31.9059	18	24005

5 Square root

Type	Mean	std.	Min	Max
uint8	23.7627	46.7759	20	20322
uint16	23.7748	40.6292	21	22630
uint32	24.5021	47.838	21	26127
uint64	27.8529	48.5107	21	26222
int8	22.927	34.0265	20	22975
int16	22.9839	40.0592	20	28850
int32	22.9233	28.7752	20	22514
int64	22.92	52.6477	20	22478
float	20.6431	31.0335	18	26097
double	22.2184	41.5124	20	22522