(1) 2 e3 + 5e-1

$2*10^3 + 5*10^{-1}$

$= 2000 + 0.5$

$= 2000.5$

✓

(2) 1.6e2 * 4e-3

$(1.6*10^2)*(4*10^{-3})$

$= (1.6*100)*(4 \div 1000)$

$= \frac{160.0 * 4}{1000}$

$= \frac{640}{1000}$

$= 0.640$

✓

$\frac{160}{1\ 4}$

640

$\frac{9}{11} = .\overline{81}$

$\sim \frac{82}{100}$

(3) 1e-4 / 2e-2

$0.0001 \div 2e-2$

$= 0.0001 \div 0.02$

$= \frac{1}{10000} \div \frac{2}{100}$

$= \frac{1}{10000} \times \frac{100}{2}$

$= \frac{50}{10000}$

$= 0.0050$

✓

(4) (3e3) **2

$= 3000 ** 2$

$= 3000 \times 3000$

$= 9,000,000$

✓

(5) 1.2345 e 6

$= 1.2345 \times 10^6$

$= 12345000$ ✗

(6) 1.2345 e -12

$= 0.000000000012345$ ✓

(7) 0.00000789e3

$= 0.00000789 \times 1000$

$= 0.00789$

✓

(8) 4e-1 + 2e1

$= 4 \times 10^{-1} + 2 \times 10^{1}$

$= 0.4 + 20$

$= 20.4$

✓

(9) 0.1 + 0.2 == 0.3

= 0.3 == 0.3

= true

✓

(10) 10000000000.0+1 == 10000000001.0

= 10000000 1.0 == 10000000001.0

= true

✓

(11) 10000000000.1 + 1.2 == 10000000001.3

true