

Name \_\_\_\_\_

1. Convert the following measurements into meters.

a) 5.323 Gm

b) 7320400000 nm

c) 630 dm

d) 0.79302 mm

e)  $8.21 \times 10^4$  km

f) 0.036102 cm

g)  $2.653 \times 10^7$   $\mu\text{m}$

h) 932 Mm

2. State the number of significant figures in the following measurements.

a) 70.390 m

b) 654 km

c) 8.0 kg

d) 0.00763 kg

e)  $7.320 \times 10^8$  g

f) 93200 N

g) 50000 J

h) 43800. W

i) 650 kg · m/s

j) 0.2340 s

3. Perform the following computations. Record your answers paying appropriate attention to significant figures.

a)  $62.376 \text{ m} + 72 \text{ m}$

b)  $777 \text{ s} - 4.65 \text{ s}$

c)  $(68 \text{ m})(9 \text{ m})$

d)  $(643.8 \text{ m}) / (21 \text{ s})$

e)  $(0.004 \text{ m/s})(388 \text{ s})$

f)  $(780 \text{ kg}) / (1.9 \text{ m}^3)$

g)  $2.45022 \text{ m} - 0.034 \text{ m}$

h)  $9.240 \text{ s} + 10.5 \text{ s}$

i)  $5400 \text{ km} + 48 \text{ km}$

j)  $(8742 \text{ J}) / (2.5 \text{ s})$