



M10C – Review and Referent Worksheet

Name: Key!
 Date: Nov 4th 2011

1. Substitute and evaluate each expression. Round your answer as indicated. (2 marks each)

a) $SA = 4\pi r^2$ If $r = 7.5$, find SA to the nearest tenth.

$$SA = 4\pi (7.5)^2 = 706.9$$

125

b) $SA = 4\pi r^2$ If $SA = 120$, find r to the nearest tenth.

$$120 = 4\pi r^2 \quad \frac{120}{4\pi} = r^2 \quad \sqrt{\frac{120}{4\pi}} = r \quad r = 3.1$$

c) $V = Ah$ If $V = 32$ and $A = 2.5$, find h to the nearest hundredth.

$$32 = 2.5h \quad \frac{32}{2.5} = h \quad h = 12.80$$

d) $S = \frac{\pi r}{4}$ If $S = 58$, find r to the nearest whole number.

$$58 = \frac{\pi r}{4} \quad 4(58) = \pi r \quad r = \frac{4(58)}{\pi} = 73.8 = 74$$

2. Round. (4 marks, half mark deduction for each incorrect answer)

| Round to the nearest → | one | ten | hundred | tenth | hundredth |
|------------------------|-------|-------|---------|---------|-----------|
| 13294.493 | 13294 | 13290 | 13300 | 13294.5 | 13294.49 |
| 943.99821 | 944 | 940 | 900 | 944.0 | 944.00 |
| 0.0982 | 0 | 0 | 0 | 0.1 | 0.10 |

9/9/2010

3. Rounding to two decimal places, express the following in scientific notation: (1 mark each)

a) 0.008 051

8.05×10^{-3}

c) 0.0051365

5.14×10^{-4}

4
b) 6 100 000

6.10×10^6

d) 0.000 009 40

9.40×10^{-6}

4. Change each of the following back to its non-exponential form: (1 mark each)

5
a) 7.64×10^{-6}

~~7~~ 0.00000764

c) 3.8×10^{-2}

0.038

b) 1.00×10^{-3}

0.001

d) 2.19×10^9

2190000000

5. Match the approximate measurement to the referent. (0.5 marks each)

B 1 inch

H 1 metre

E 1 foot

J 100 metres

G 20 cm

F 2 metres

D 12 centimeters

C 0.1 metres

A 1 centimetre

I 1 yard

~~A.~~ width of an adult pinky finger

~~B.~~ width of a thumb across the joint

~~C.~~ width of five toes of an adult

~~D.~~ diameter of a CD or DVD

~~E.~~ length of an adult male foot

~~F.~~ height of a standard doorway

~~G.~~ width of a textbook

~~H.~~ average height of a 4 year old

~~I.~~ length of an adult pace

~~J.~~ length of a CFL football field

on these could be switched.