

NAME: \_\_\_\_\_

1. The formula  $w = 0.0084C^3$  can be used to estimate the shipping weight  $w$  of an orange in ounces based on its circumference  $C$  in inches. This table shows the actual weight of several oranges selected at random. Which orange is furthest in actual weight from the predicted weight of the formula?

Orange	Circumference (in.)	Actual weight (oz)
#1	5	1.25
#2	6	1.92
#3	8	5.35
#4	10	7.81

2. The formula  $w = 0.076C^3$  models the weight  $w$  in ounces for a grapefruit having a circumference of  $C$  in inches. Find the circumference, to the nearest hundredth of an inch, of a grapefruit that weighs 18 oz.

[1] Orange #3 is much heavier than its predicted weight of 4.3008 oz.

[2] 6.19 in.