Name _____   Date _____

1. Round the quantity to the given place value. Draw number lines to explain your thinking. Circle the rounded value on the number line.
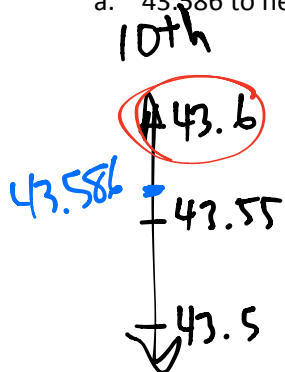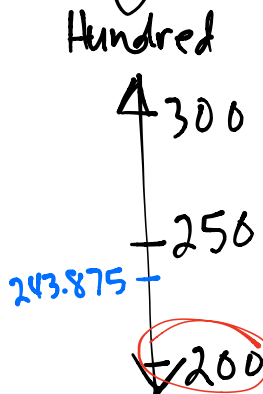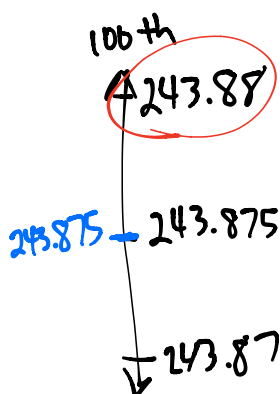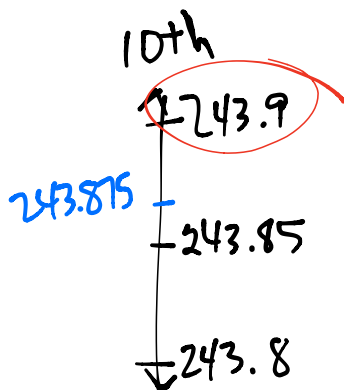
a. 43.586 to nearest tenth, hundredth, and whole number

10th

43.586 → 43.6 (circled), 43.55, 43.5

100th

43.586 → 43.59 (circled), 43.585, 43.58

Whole

43.586 → 44 (circled), 43.5, 43
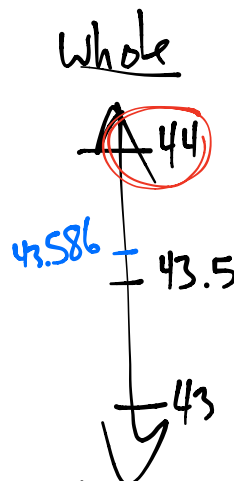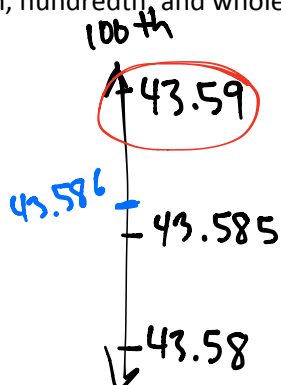
b. 243.875 to nearest tenth, hundredth, ten, and hundred

10th

243.875 → 243.9 (circled), 243.85, 243.8

100th

243.875 → 243.88 (circled), 243.875, 243.87

Hundred

300, 250, 243.875, 200 (circled)

2. A trip from New York City to Seattle is 2,852.1 miles. A family wants to make the drive in 10 days, driving the same number of miles each day. About how many miles will they drive each day? Round you answer to the nearest tenth of a mile.

$$2852.1 \div 10 = 285.21 \text{ which rounds to } 285.2 \text{ miles each day.}$$

COMMON CORE   **Lesson 8:**   Round a given decimal to any place using place value understanding and the vertical number line.   engage^ny   1.C.24

Date: 6/28/13

3. A decimal number has two digits to the right of its decimal point. If we round it to the nearest tenth, the result is 18.6.

     a. What is the maximum possible value of this decimal? Use words and the number line to explain your reasoning.

18.7 (1870 hundredths)

18.65

18.64 is the max. value that will still round down to 18.6

18.6
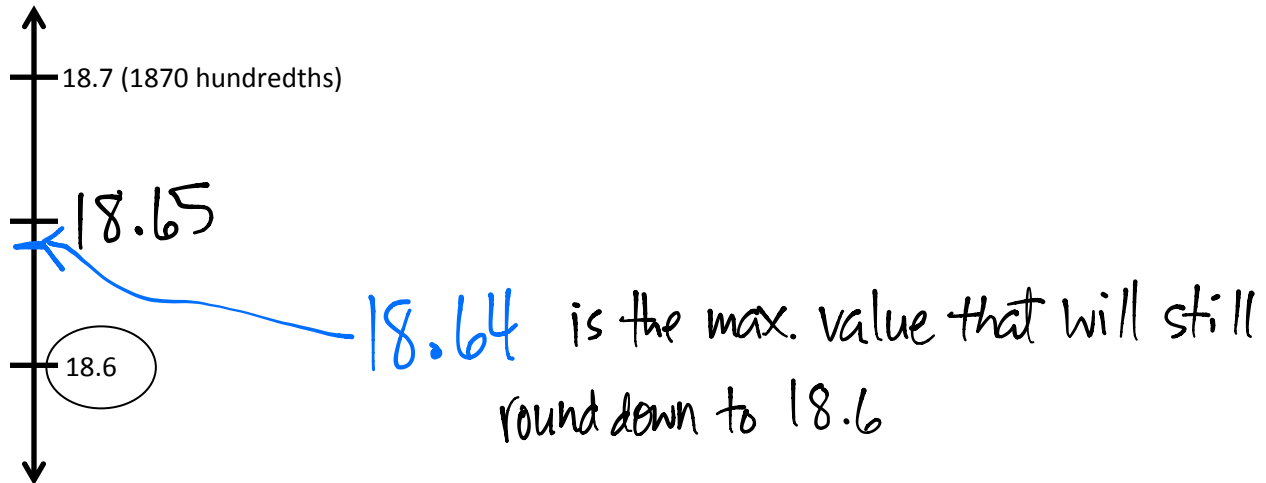
     b. What is the minimum possible value of this decimal? Use words, numbers and pictures to explain your reasoning.

18.6

18.56 is the min. value

18.55

18.5