Name _____   Date _____

1. Travis measured 5 different-colored pencils to the nearest inch, $\frac{1}{2}$ inch, and $\frac{1}{4}$ inch. He records the measurements in the chart below. He draws a star next to measurements that are exact.

Colored Pencil	Measured to the nearest inch	Measured to the nearest $\frac{1}{2}$ inch	Measured to the nearest $\frac{1}{4}$ inch
Red	7	$6\frac{1}{2}$	$6\frac{3}{4}$
Blue	5	5	$5\frac{1}{4}$
Yellow	6	$5\frac{1}{2}$ ☆	$5\frac{1}{2}$ ☆
Purple	5	$4\frac{1}{2}$	$4\frac{3}{4}$
Green	2	3	$1\frac{3}{4}$

a. Which colored pencil is the longest? _____

It measures _____ inches.

b. Look carefully at Travis's data. Which colored pencil most likely needs to be measured again? Explain how you know.

2. Evelyn marks a 4-inch paper strip into equal parts as shown below.

| | | | | | | | |

a. Label the whole and half inches on the paper strip.

b. Estimate to draw the $\frac{1}{4}$ inch marks on the paper strip. Then, fill in the blanks below.

1 inch is equal to _____ half inches.

1 inch is equal to _____ quarter inches.

1 half inch is equal to _____ quarter inches.

2 quarter inches are equal to _____ half inch.

3. Travis says his yellow pencil measures $5\frac{1}{2}$ inches. Ralph says that's the same as 11 half inches. Explain how they are both correct.

Answer Key

1. a. Red pencil; $6\frac{3}{4}$

   b. Green pencil; explanations will vary.

2. a. Whole and half inches labeled on paper strip

   b. 2; 4; 2; 1

3. Explanations will vary.