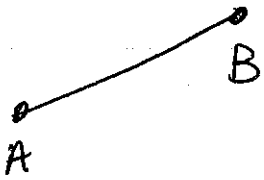
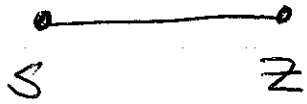
1.3 The Line Segment (Key Ideas) 9-17-2014

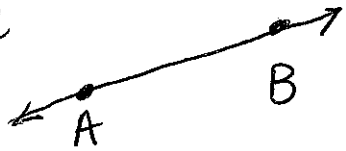
★ The line segment 

is denoted

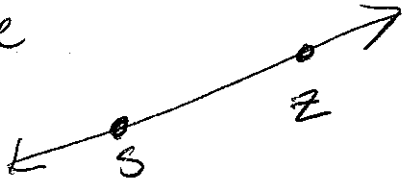
like this $\overline{AB}$ book also uses AB

① How would you denote 

? $\overline{SZ}$

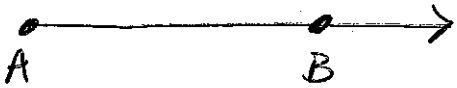
★ The line 

is denoted as: $\overleftrightarrow{AB}$

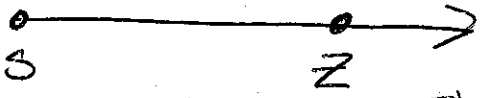
② How would you denote 

?

$\overleftrightarrow{SZ}$

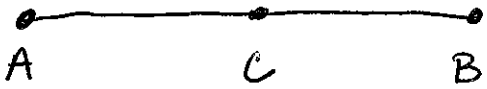
★ The ray 

is denoted as $\overrightarrow{AB}$

③ How would you denote 

?

$\overrightarrow{SZ}$

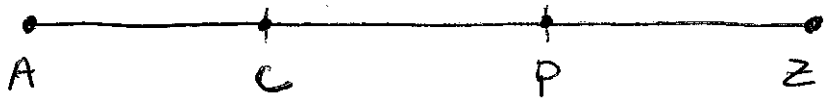
★ Midpoint 

$$AC = \frac{1}{2} AB$$

so based on the definition of midpoint if AB was 10 cm long, ④ How long is AC? 5 cm

★ Trisection Points - each part is one third of a whole...

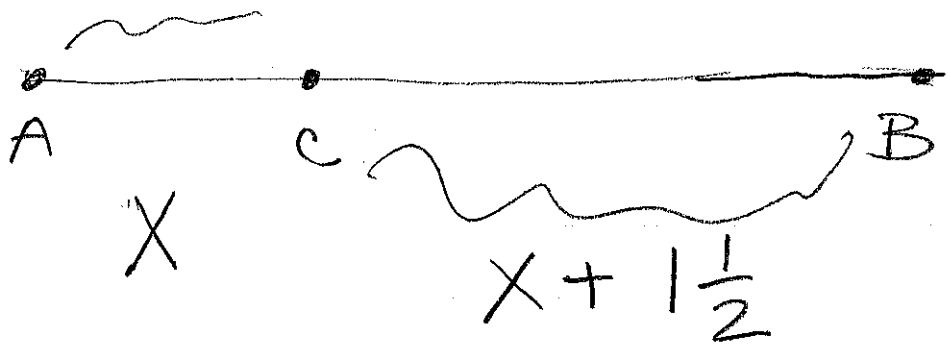
⑤ If AZ was 30 cm long, how long would each part be? AC, CP & PZ



★ Remember - just "eyeballing" won't work when judging measurements.

Example 1 (page 6)

page 6 Example 1



$\overline{AB} = 4\text{in}$

$$\underbrace{\boxed{4}}_{\overline{AB}} = \underbrace{\boxed{x + 1\tfrac{1}{2}}}_{\overline{CB}} + \underbrace{\boxed{x}}_{\overline{AC}}$$

$$4 = 2x + 1\tfrac{1}{2}$$

$$-1\tfrac{1}{2} \qquad\qquad -1\tfrac{1}{2}$$

$$\frac{2\tfrac{1}{2}}{2} = \frac{2x}{2}$$

$1\frac{1}{4}\text{in} = x$

$\overline{AB} = 4\text{in}$

$\overline{AC} = 1\frac{1}{4}\text{in}$

$\overline{CB} = 2\frac{3}{4}\text{in}$