

HW #1-7 Answers

① varies!

possible answers: K, A, H, E

② varies!

possible answer: A, L, B

③ varies!

Possible answer: $\overleftrightarrow{AB}$ and $\overleftrightarrow{GF}$

④ varies!

possible answer: K, C, D

⑤ varies!

possible answer: plane AHG

⑥ varies!

possible answer: plane KCD, plane ACE

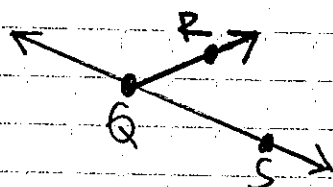
⑦ varies!

possible answer: $\overline{HG}$, $\overline{AL}$, $\overline{DE}$

⑧ varies!

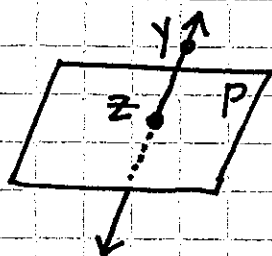
possible answer: $\overrightarrow{CE}$, $\overrightarrow{AL}$, $\overrightarrow{DE}$

⑨

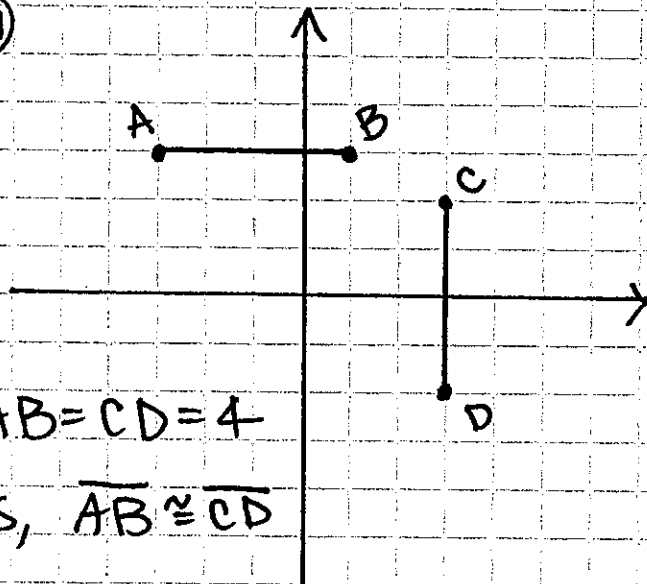


varies!

10



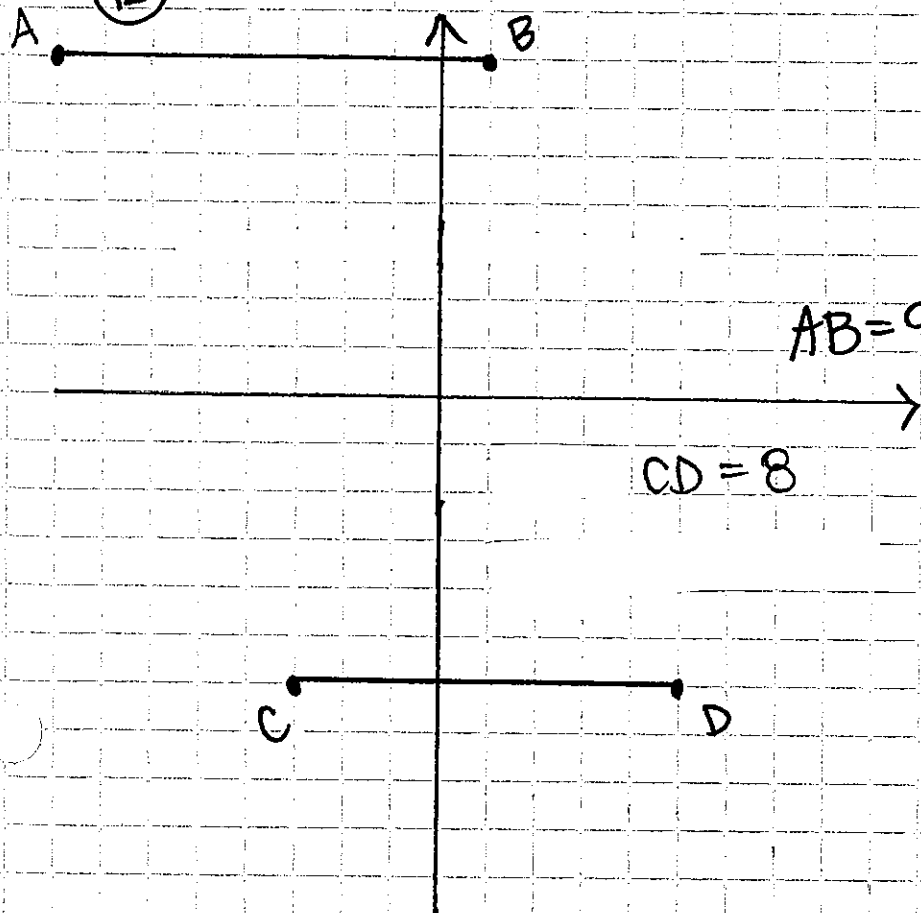
11



$$AB = CD = 4$$

yes, $\overline{AB} \cong \overline{CD}$

12



$$AB = 9$$

$$CD = 8$$

No, $\overline{AB}$ is
not $\cong$ to $\overline{CD}$

$$(13) \quad AB + BC = AC$$

$$13 + 26 = AC$$

$$\boxed{39 = AC}$$

$$(14) \quad AC + CB = AB$$

$$AC + 11 = 62$$

$$\boxed{AC = 51}$$

$$(17) \quad \text{Midpoint: } \left(\frac{-6+1}{2}, \frac{-1+2}{2} \right)$$

$$= \boxed{\left(-\frac{5}{2}, \frac{1}{2} \right)}$$

$$\text{Length: } PQ = \sqrt{(-6-1)^2 + (-1-2)^2}$$

$$= \sqrt{(-7)^2 + (-3)^2}$$

$$= \sqrt{49+9}$$

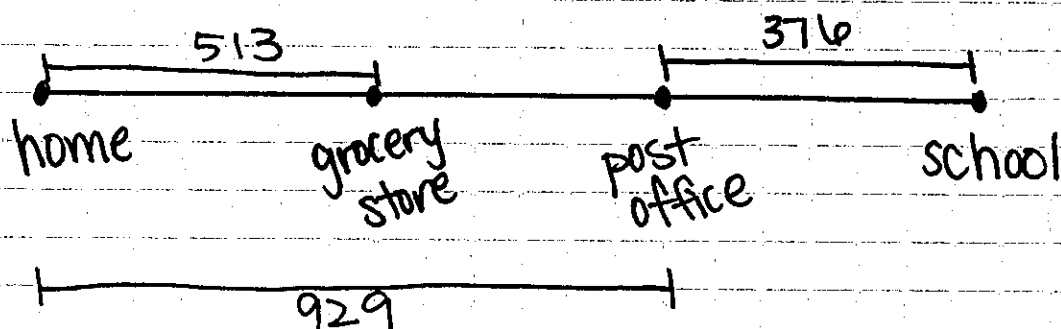
$$= \boxed{\sqrt{58}}$$

(18) segment bisector: point M

$$RS = 32$$

(19) K is at $(6, -1)$

(20)



a) stop @ post office first

b) 416 yards

c) 1305 yards

(21) dist. btwn home + 2nd plate: $90\sqrt{2}$ feet

dist. btwn home + pitcher's mound: $45\sqrt{2}$ ft