| $\mathbf{1}$ | Mid point $(1,-4)$ <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> $\frac{y+-5-5}{3--1}=\frac{2}{4}=\frac{1}{2}$ Grd of mirror line $=-2$ <br> $y+4=-2 x+2$ <br> $y+2 x+4-2=0$ <br> $y+2 x+2=0$ | $\mathrm{~B}_{1}$ |
| :---: | :---: | :---: |
| $\mathrm{~B}_{1}$ |  |  |

1. (a) Dist. traveled in 3hrs s. drawing

Plane $A-400 \times 3=1200 \mathrm{~km}-\mathrm{cm}$
Plane $B-500 \times 3-7.5 \mathrm{~cm}$
Plane $C-300 \times 3=900 \mathrm{~km}-4.5 \mathrm{~cm}$
(b) Dist. $B A=12.80 .1 \times 200=2560 \mathrm{~km} 20 \mathrm{~km}$

$$
\begin{aligned}
T & =\frac{D}{S}=\frac{2560}{500} \mathrm{hrs} \\
& =5.12 \mathrm{hrs} \text { of } 5 \mathrm{hrs}, 7.2 \mathrm{mms} \\
& \approx 5 \mathrm{hrs}, 7 \mathrm{~min}(\text { nearest min) }
\end{aligned}
$$

(c) Bearing of $B$ from $C=360^{\circ}-20^{\circ}=340^{\circ}$

Dist. $B C=(10.9 \pm 0.1 \times 200) \mathrm{km}$
$=2180 \mathrm{~km} \pm 20 \mathrm{~km}$

