

$$\begin{aligned} \textcircled{1} \sqrt{5^2 + 3^2} &= \sqrt{25+9} \\ &= \sqrt{34} \\ &= 5.8 \end{aligned}$$

$$\textcircled{2} \begin{array}{c} \text{N} \\ \uparrow \\ \text{E} \\ \downarrow \\ \text{S} \end{array} \text{ South}$$

③ South

$$\begin{aligned} \textcircled{4} \sqrt{10^2 + 4^2} &= \sqrt{100+16} \\ &= \sqrt{116} = 10.7 \end{aligned}$$

$$\begin{aligned} \textcircled{5} \sqrt{3^2 + 4^2} &= \sqrt{9+16} \\ &= \sqrt{25} = 5 \end{aligned}$$

$$\textcircled{6} \begin{array}{c} 12 \\ \uparrow \\ \text{E} \\ \downarrow \\ 6 \end{array} 90^\circ$$

$$\textcircled{7} 180^\circ$$

$$\begin{aligned} \textcircled{8} 12 \text{ pm} &\rightarrow 0^\circ \\ 15 \text{ min} &\rightarrow 15 \times 0.5 \\ &= 7.5^\circ \end{aligned}$$

$$\text{Minute} = 15 \times 6 = 90^\circ$$

$$\text{Angle} = 90 - 7.5 = 82.5^\circ$$

⑨ West

⑩ 11 times

⑪ 5 km \rightarrow North

$$\begin{array}{c} \text{N} \\ \uparrow \\ \text{E} \\ \downarrow \\ \text{S} \end{array}$$

$$\text{East} = 12$$

$$\text{N-S} = 5-5 = 0 \text{ km}$$

$$\begin{aligned} \sqrt{0^2 + 12^2} \\ &= 12 \end{aligned}$$

⑫ South

⑬ N + 45° (clock)
 \rightarrow Norm East

$$90^\circ (\text{Anti}) = -45^\circ \text{ left}$$

\therefore Norm West

$$\begin{aligned} \textcircled{14} \text{N-S} &= 8-2 = 6 \\ \text{W} &= 6 \end{aligned}$$

$$\begin{aligned} \text{Displ} &= \sqrt{6^2 + 6^2} \\ &= \sqrt{72} = 8.4 \end{aligned}$$

$$\textcircled{15} \text{E-W} = 7-7 = 0$$

$$\text{North} = 24$$

$$\textcircled{16} 19^\circ$$

⑰

⑱

$$\begin{aligned} \textcircled{19} \text{Overlap} \\ &= (60/11) \times 11 \end{aligned}$$

$$11 = 2 \rightarrow (60/11) \times 2 = 10$$

$$10/11 \text{ min past } 2$$

$$\Rightarrow 2:10:55$$

$$\textcircled{20} \begin{array}{c} \text{min} \\ 60/59 \text{ min} \end{array}$$

\therefore 59 times

$$\textcircled{21} \text{E-W} = 6-6 = 0$$

$$\text{N-S} = 8-3 = 5 \text{ km}$$

$$\begin{array}{c} \text{N} \\ \uparrow \\ \text{E} \\ \downarrow \\ \text{S} \end{array}$$

$$135^\circ \rightarrow \text{SE}$$

$$+ 90^\circ \rightarrow \text{SW}$$

$$+ 225^\circ \rightarrow \text{East}$$