

Answers from Hw (Area of a Triangle)

17 a) 42.1 m^2

b) 18.2 m^2

c) 104.1 m^2

18. a) 60.4

b) 42.1

*c) 429.2

19. 20140.3 km^2

* 20 6.6 m^2

* 21 390.3 cm^2

22. \$884.21

23. 1.55 m^2

24. 38.0 cm^2

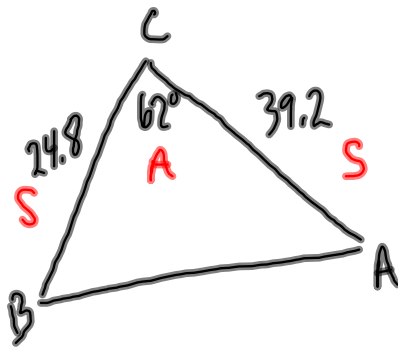
25. $\theta = 65^\circ$

26. $OP = 14.5$

$$18c) \quad \angle C = 62^\circ$$

$$AC = 39.2$$

$$BC = 24.8$$



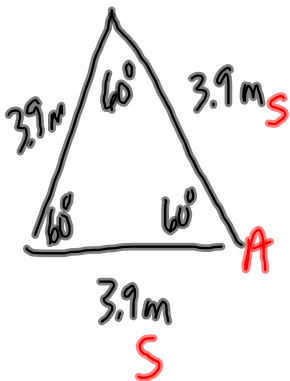
$$\text{Area} = \frac{1}{2} ab \sin C$$

SS A

$$\text{Area} = \frac{1}{2} (24.8)(39.2) \sin 62^\circ$$

$$\text{Area} = 429.2$$

20.

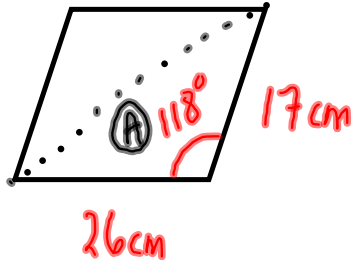


$$\text{Area} = \frac{1}{2}ab\sin C$$

$$\text{Area} = \frac{1}{2}(3.9\text{m})(3.9\text{m})\sin 60^\circ$$

$$\text{Area} = 6.59\text{m}^2$$

21.



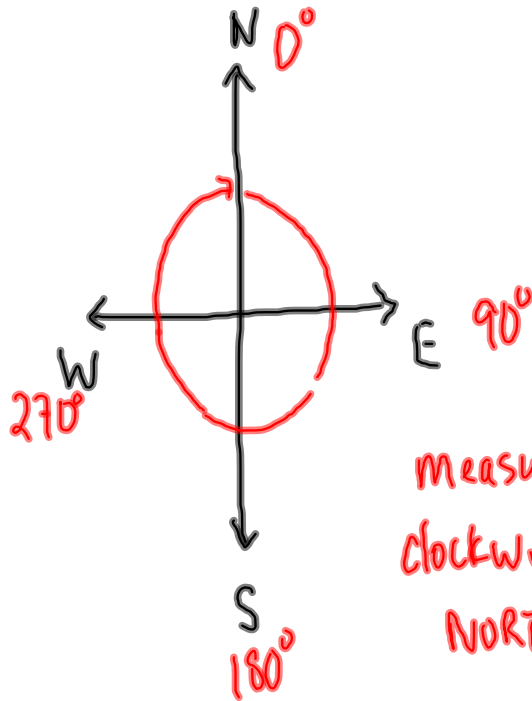
$$\begin{aligned} \text{Area of } \triangle A &= \frac{1}{2}ab\sin\theta \\ &= \frac{1}{2}(26\text{cm})(17\text{cm})\sin 118^\circ \\ &= 195.1\text{cm}^2 \end{aligned}$$

Area of Parallelogram

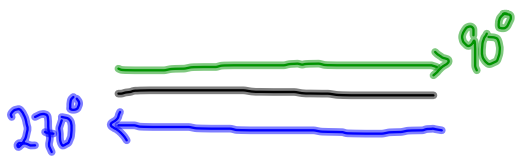
$$\begin{aligned} &= 2 \times \text{Area of } \triangle A \\ &= 390.3\text{cm}^2 \end{aligned}$$

Azimuth

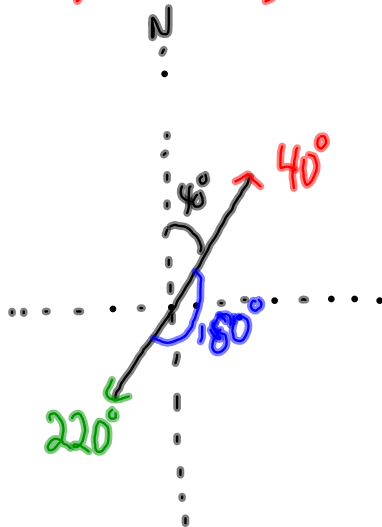
Refers to the measure of an angle relative to magnetic north.



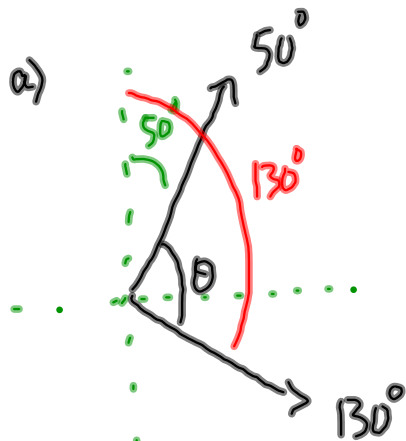
measure angles clockwise from NORTH.



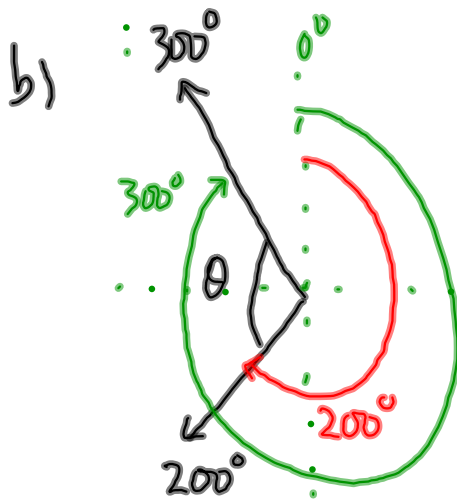
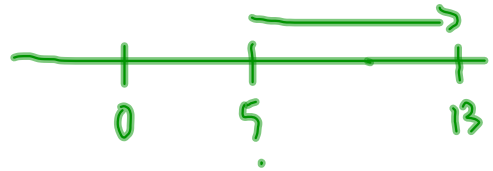
Two possible azimuths for every line.



Example

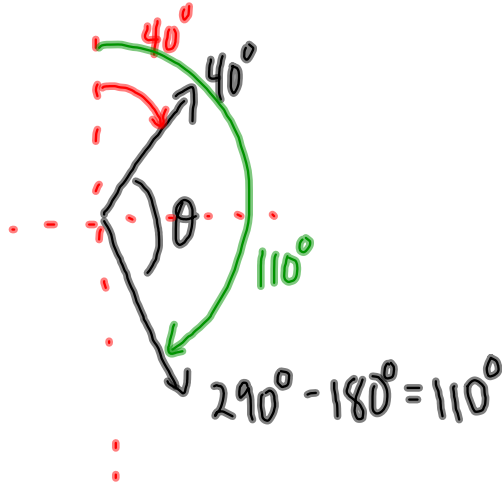
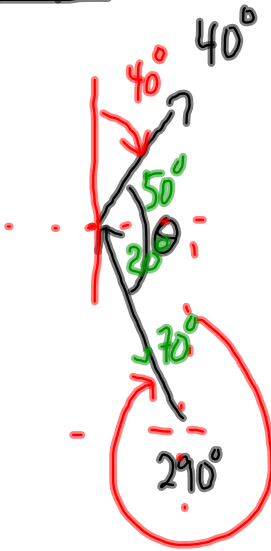


$$\theta = 130^\circ - 50^\circ$$
$$\theta = 80^\circ$$



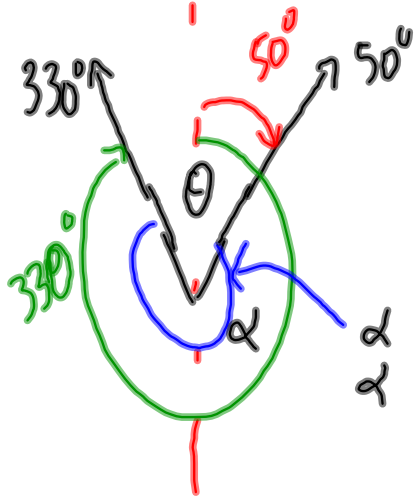
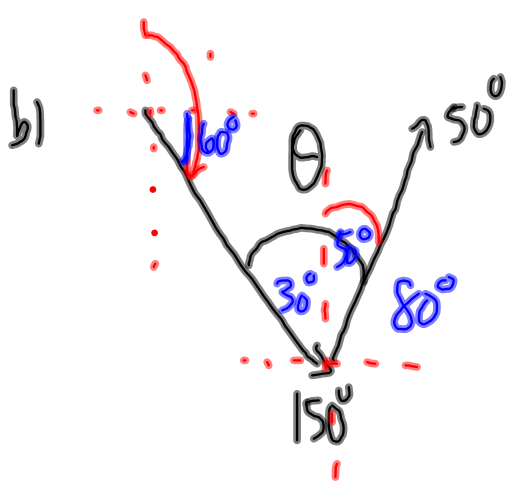
$$\theta = 300^\circ - 200^\circ = 100^\circ$$

Example



$$\theta = 110^\circ - 40^\circ$$

$$\theta = 70^\circ$$



$$\alpha = 330^\circ - 50^\circ$$

$$\alpha = 280^\circ$$

$$\theta = 360^\circ - 280^\circ$$

$$\theta = 80^\circ$$

① Finish GW - areas of lots.

② Azimuth Sheet

③ Concept Check on Thursday (Area of a Triangle)

$$\text{Area} = \frac{1}{2}ab\sin C$$

- find Area of a \triangle

- find area of a quadrilateral with 90°