

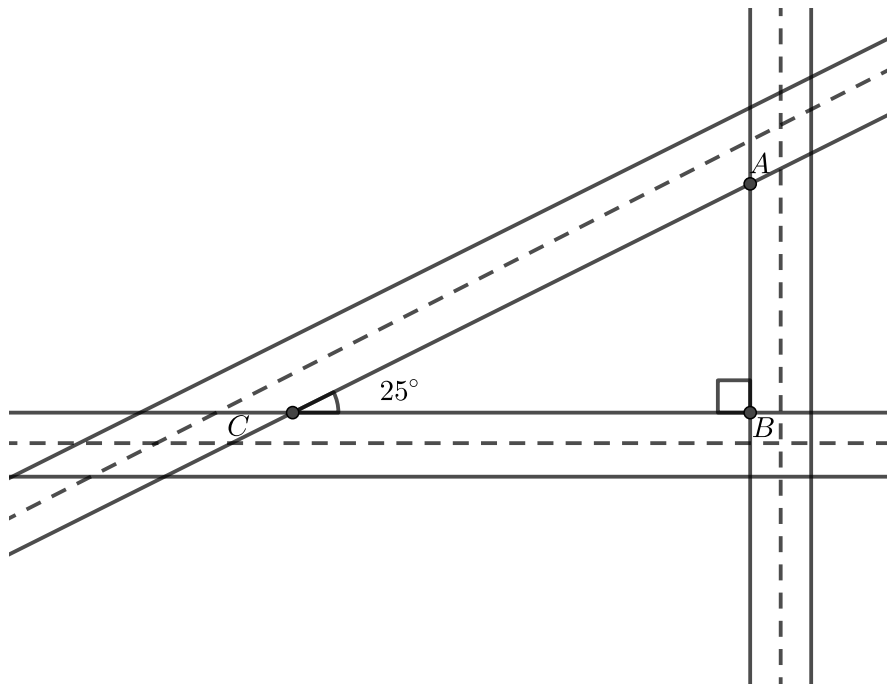


Problem of the Week

Problem E

Roads All Around

Tima owns a triangular parcel of land that is created by three intersecting roads, as shown. Two of the roads meet at a right angle and two of the roads intersect at a 25° angle. If the perimeter of the triangular parcel of land is 1000 m, what is its area to the nearest 100 m^2 ?



RECALL: For any acute angle, θ , of any right-angled triangle, we define the following:

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}, \cos \theta = \frac{\text{adj}}{\text{hyp}}, \tan \theta = \frac{\text{opp}}{\text{adj}}$$

