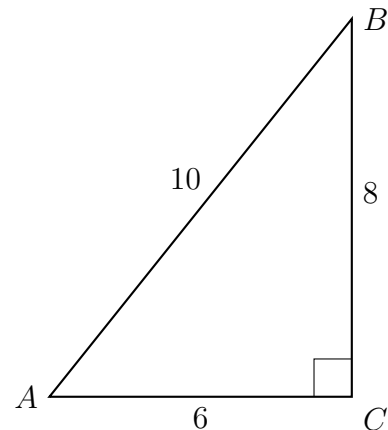


6.14 Retest (optional)**HSG.SRT.D.11**

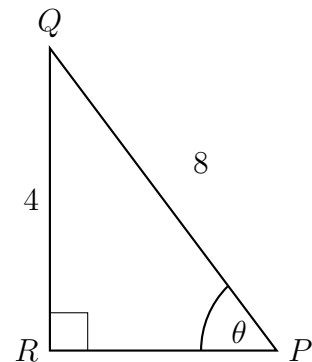
1. Right triangle $\triangle ABC$ is shown with side lengths marked.

- (a) Which length is the hypotenuse?
- (b) Which length is *opposite* angle A ?
- (c) Which length is *adjacent* to angle A ?
- (d) What is the area of the triangle?
- (e) What fraction describes $\cos A$?

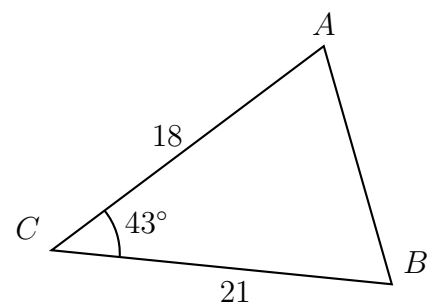


2. Right triangle $\triangle PQR$ is shown with side lengths marked.

- (a) Calculate the length PR.
- (b) What fraction is $\sin \theta$?
- (c) What fraction is $\cos \theta$?
- (d) What fraction is $\tan \theta$?
- (e) Which function of θ is $\frac{4}{8}$?
(tan, sin, or cos)
- (f) Find the area of the triangle.



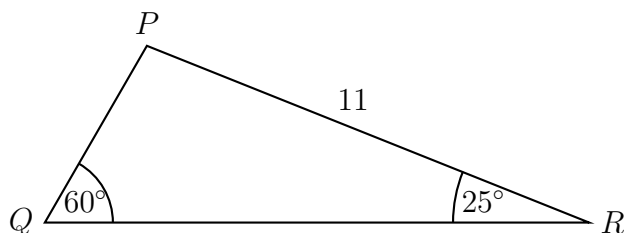
3. Find the area of the given triangle.



4. The following diagram shows triangle PQR , with $\hat{PQR} = 60^\circ$, $\hat{PRQ} = 25^\circ$, and $PR = 11$.

Find PQ .

diagram not to scale

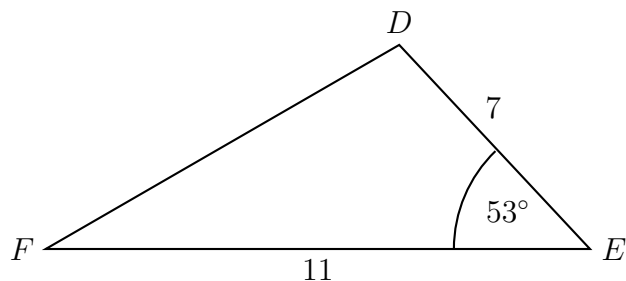


5. The following diagram shows triangle DEF , with $DE = 7$, $\hat{DEF} = 53^\circ$, and $EF = 11$.
.

diagram not to scale

(a) Find DF .

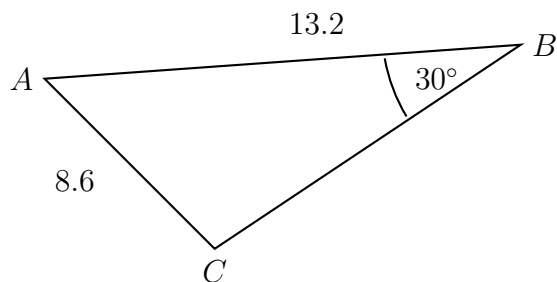
(b) What is the area of the triangle?



6. Triangle ABC has side lengths $AB = 13.2$ and $AC = 8.6$, while $\hat{ABC} = 30^\circ$.

diagram not to scale

(a) Find $\sin C$.



(b) Find $\angle C$.