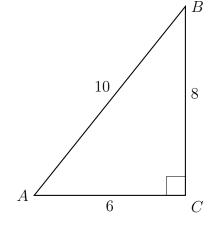
Name:

12.5 End of unit test

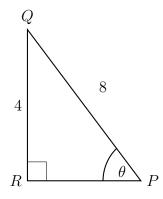
27 May 2022

HSG.SRT.D.11

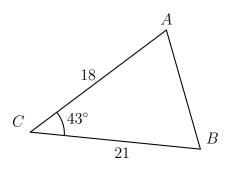
- 1. Right triangle $\triangle ABC$ is shown with side lengths marked.
 - (a) Which length is the hypotenuse?
 - (b) Which length is *opposite* angle A?
 - (c) Which length is *adjacent* to angle A?
 - (d) What is the area of the triangle?
 - (e) What fraction describes $\cos A$?



- 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.



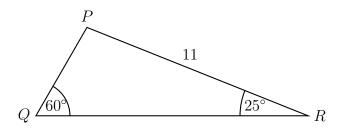
3. Find the area of the given triangle.



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

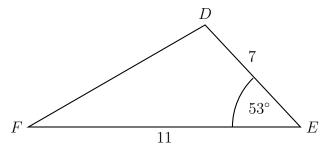
Find PQ.

diagram not to scale



5. The following diagram shows triangle DEF, with DE=7, $D\hat{E}F=53^{\circ}$, and EF=11. diagram not to scale

(a) Find DF.

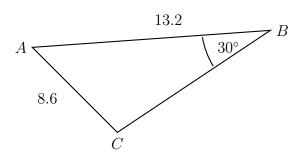


(b) What is the area of the triangle?

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

diagram not to scale

(a) Find $\sin C$.



(b) Find $\angle C$.