1. Find the length of $\overline{PR}$ to the nearest integer.

R

16

38°   88°

P   Q
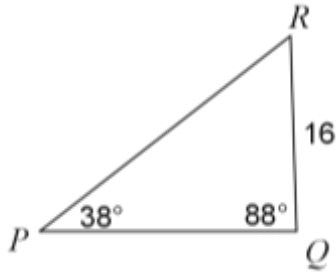
2. Find the measure of $\angle T$ to the nearest degree.

R   10   S
   79°

17

T
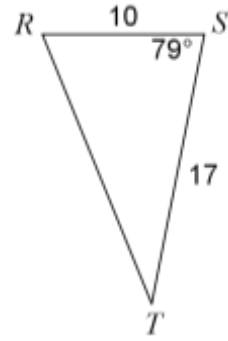
3. Find the measure of $\angle P$ to the nearest degree.

P

29

13

H

21   K
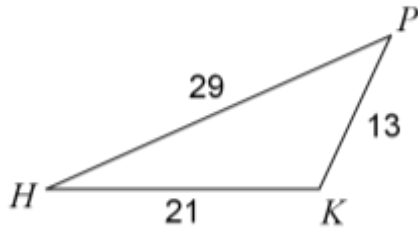
SRT-C8a

4. Air traffic control has a faulty radar and cannot locate aircraft. From the ground, a person measures the angle of elevation up to two incoming aircraft as 18° and 31° as shown below. Each plane sends its altitude in by radio as 2000ft and 4200ft. In terms of their ground distance, how far apart are the planes from each other to the nearest foot? Show the calculations that lead to your answer.

4200ft

2000ft

31°

18°

?
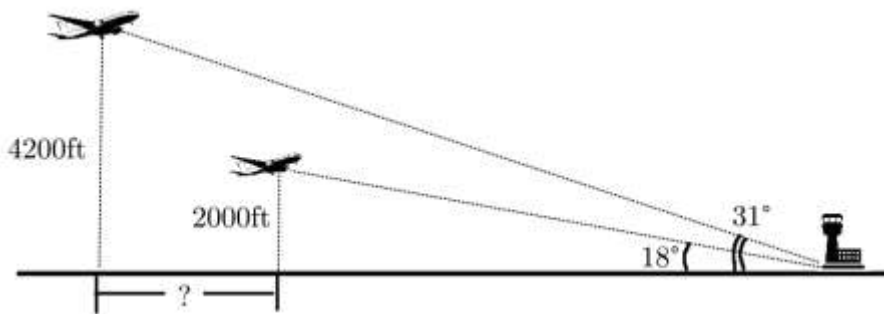
5. Find the <u>perimeter</u> of a square whose diagonal length measures $3\sqrt{2}$. Show all work

6. Find the <u>exact</u> values of x and y below.
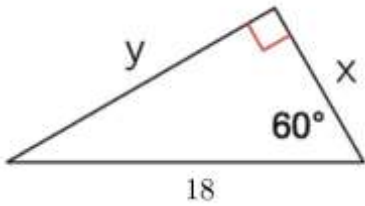
7. Select all the true statements.

[   ] $\sin F = \sin E$
[   ] $\sin F = \sin C$
[   ] $\tan C = \tan E$
[   ] $\sin E = \cos C$
[   ] $\cos C = \cos F$
[   ] $\sin C = \cos F$
[   ] $\sin E = \sin C$