## AL MOATTASSEM INTERNATIONAL SCHOOL - JUBAIL

 Level 7 Mathematics ch 10 -Pythagoras Theorem
## Second Term - Revision 2 - Questions

## Solve the following:

Q1) Find the value of the unknown in each of the following rightangled triangles.

20 cm i)

Q2) Find the value of the unknowns in each of the following rightangled triangles.

i)


Q3) In $\triangle A B C A B=8 \mathrm{~cm}, B C=15 \mathrm{~cm}$ and $\angle B=90^{\circ}$. Find the length of AC.

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Q4) Each side of a square field is 50 m long. A barricade is to be placed along the diagonal of the field. Find the length of the barricade.

Q5) Determine if each of the following triangles is a right- angled triangle. For each right-angled triangle, state the right angle.
a) $\triangle A B C$, given that $A B=12 \mathrm{~cm}, B C=10 \mathrm{~cm}$ and $A C=8 \mathrm{~cm}$
b) $\triangle P Q R$, given that $P Q=34 m, Q R=16 \mathrm{~m}$ and $P R=30 \mathrm{~m}$

Q6) In $\triangle P Q R, P Q=19 \mathrm{~cm}, Q R=24 \mathrm{~cm}$ and $P R=30 \mathrm{~cm}$. Show that $\triangle P Q R$ is not a right-angled triangle.

Formula

Pythagoras Theorem:
c

$$
a^{2}+b^{2}=c^{2}
$$

$a=\sqrt{c^{2}-b^{2}}$
$b=\sqrt{c^{2}-a^{2}}$
$c=\sqrt{a^{2}+b^{2}}$

## Converse of Pythagoras Theorem:

In a triangle $A B C$, if $A B^{2}=B C^{2}+A C^{2}$


$$
\mathrm{C}^{2}=\mathrm{a}^{2}+\mathrm{b}^{2}
$$

Then $\quad \angle \mathrm{C}=90^{\circ}$

