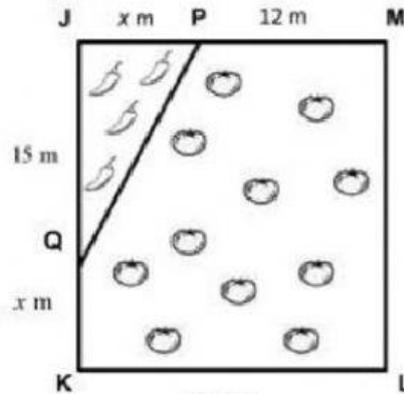**Question 1**

The Diagram 4 below show vegetable farm of chilies and tomatoes in rectangle form JKLM. Given that JP = KQ = X m. There are iron fences at the whole area farm.

Rajah 4
Diagram 4

(a) Evaluate an expression for farm area, L m^2, in term of x

Calculation, L =

[blank box]

=

[blank box]

Answer, =

[blank box]

(b) Given that area of the farm in rectangles is 460 m^2. Find the value of x.

[blank box] = 460

[blank box] = 0

[blank box] = 0

([blank]) X ([blank]) = 0

Answer, X = [blank]

(c) Safwan wants to build a fence to separate the area of chili vegetables with tomatoes at point P to point Q. If the price of the fence is RM50 per meter and Safwan has a budget of RM 1000. State whether Safwan has a sufficient budget to build the fence and give the total cost.

$C = \sqrt{}$

$= \sqrt{}$

$= \sqrt{}$
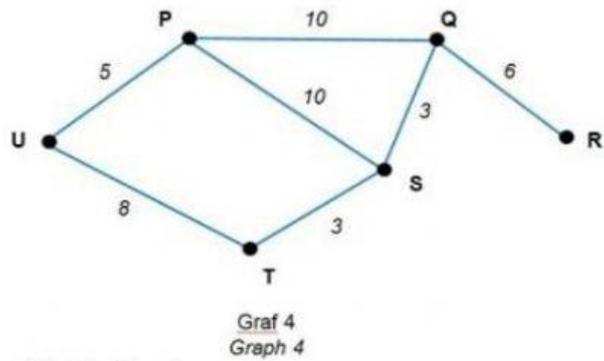
Length of PQ, =

Total Cost to build the fence from point P to point Q =

=

As a conclusion, the budget to build the fence is

Question 2

The Graph 4 below shows indirect weighted graph.

Graf 4
Graph 4

(a) Complete Table 4 below:

Vertex Pair	Weight
(P, Q)	10
(P, S)	
(P, U)	
(Q, R)	
(Q, S)	
(U, T)	
(S, T)	

(b) (i) List **THREE** routes option from point U to R instead of the route mentioned.

U -> P -> Q -> R

=

(ii) State the shortest distance route from point U to R

Answer, =

(c) If a line is drawn between point P to point T, and PUT forms a right-angled triangle with an angle of PUT is 90°. Find the length of point P to point T.

$$ C \quad = \quad \sqrt{} $$

$$ = \quad \sqrt{} $$

$$ = \quad \sqrt{} $$

Answer, =