QQ7

Remzi's Total Cost

0 points possible (ungraded)

Remzi Bookstore is a nationwide franchise that operates in Turkey. They place orders for exam preparation books at the begining of each month. Remzi has:

- a purchasing cost C_p equal to 110 lira per book,
- a monthly demand D equal to 80 books,
- an ordering cost C_o equal to 30 lira per order, and
- a holding cost C_e equal to 100 lira per book per month.

Assuming a constant demand and zero lead time, the total logistics cost for Remzi is given by the following multivariate function:

$$TC = (C_p)(D) + (C_o)\left(\frac{D}{Q}\right) + (C_e)\left(\frac{Q}{2}\right)$$

What is the value of this function if Q is equal to 200?

In other words, what is the value of TC if you replace all the other variables in the expression with their numeric values? Give your answer rounded to the nearest integer.

18812 ✔ **Answer:** 18812

18812

Explanation

The answer is found by evaluating this expression:

$$TC = (110)(80) + (30)\left(\frac{80}{200}\right) + (100)\left(\frac{200}{2}\right)$$

...which yields:

$$TC = 18812$$

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Answers are displayed within the problem

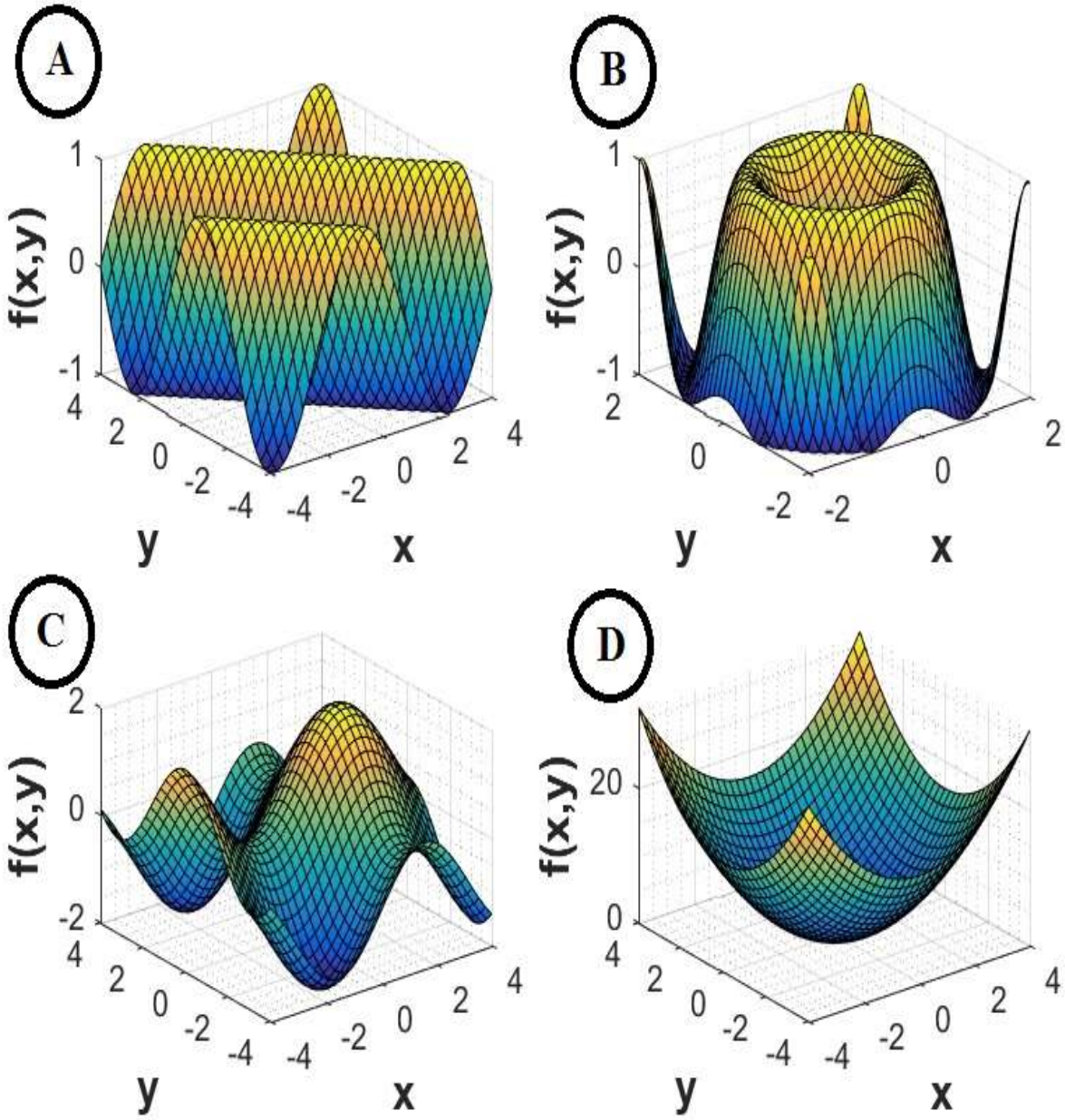
Plotting Multivariate Functions

0 points possible (ungraded)

Although it was a daunting task in the past, plotting multivariate functions is now remarkably easy with modern computers. If you want to try your hand at creating a 3-dimensional plot of a two-variable function, enter the following plot in Wolfram|Alpha:

```
plot x^2 + y^2
```

This will instruct the software to plot the following multivariate function as a three-dimensional plot: $f(x, y) = x^2 + y^2$. Which of the following graphs corresponds to the function you have plotted?



Choose one graph.

- Graph A
- Graph B
- Graph C
- Graph D ✔

Explanation

To plot this function in Wolfram|Alpha, enter:

```
plot3d x^2+y^2
```

Graph A: $f(x,y) = sin(x+y)$;
Graph B: $f(x,y) = sin(x^2+y^2)$;
Graph C: $f(x,y) = sin(x) + cos(y)$;
Graph D: $f(x,y) = x^2 + y^2$;

Submit You have used 1 of 3 attempts

Answers are displayed within the problem

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? Is there any equivalent plot function in cymath for plot3d x^2 + y^2?
What's the equivalent plot function in cymath for plot3d x^2 + y^2 — 5

formula
Sir, I can not get the formula clearly. — 9

Existence of holding cost.
What does {Ce * Q/2} stand for? For example, Cp * D stands for the volume purchased in Lira, Co * ... — 5

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