ONTARIO PRINCIPLES OF MATHEMATICS, GRADE 10, ACADEMIC (MPM2D) · UNIT B · 10 QUESTIONS

Linear Systems — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **Solve the system y = -2x + 5, y = -2x + 5. The system has**

- A one solution
- B no solution
- C infinitely many solutions
- D two solutions

Understand It with Pulse | Flag a mistake

2 **The sum of the ages of two sisters is 48 years. The older sister is 3 times as old as the younger sister. The age, in years, of the younger sister is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The sum of the ages of two sisters is 36 years. The older sister is 2 times as old as the younger sister. The age, in years, of the younger sister is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A rectangle has perimeter 52 metres. Its length is 6 metres longer than its width. The width, in metres, is**

ANSWER _____

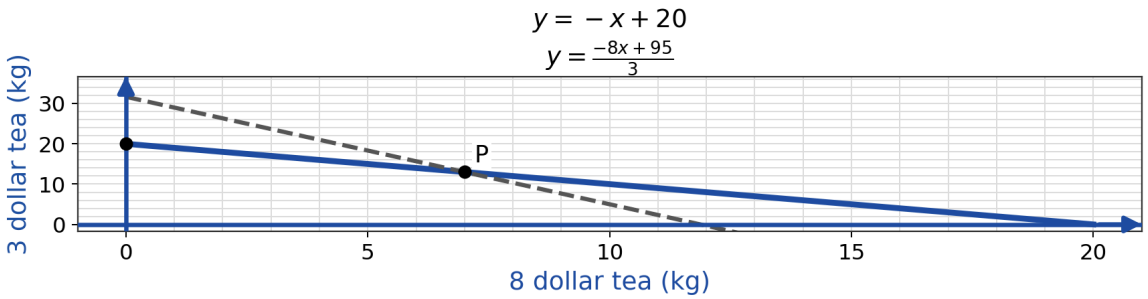
Understand It with Pulse | Flag a mistake

5 **A rectangle has perimeter 44 metres. Its length is 10 metres longer than its width. The width, in metres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The graph shows two lines for a tea mixture. A grocer mixes tea at 8 dollars per kilogram and tea at 3 dollars per kilogram. He makes 20 kilograms of mixture worth 95 dollars in total. The lines intersect at P. The mass, in kilograms, of the 8 dollar tea in the mixture is**



ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A grocer mixes tea at 12 dollars per kilogram and tea at 5 dollars per kilogram. He makes 30 kilograms of mixture worth 276 dollars in total. The mass, in kilograms, of the first tea in the mixture is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A theatre sells adult tickets for 14 dollars and child tickets for 8 dollars. On one night, 45 tickets were sold for a total of 522 dollars. The number of adult tickets sold was**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **The sum of the ages of two sisters is 50 years. The older sister is 4 times as old as the younger sister. The age, in years, of the younger sister is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Plan A costs 48 dollars plus 5 dollars per hour. Plan B costs 11 dollars per hour. For how many hours do the two plans cost the same amount?**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. 12
3. 12
4. 10
5. 6
6. 7
7. 18
8. 27
9. 10
10. 8

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