@title Pizza Topping Choices
@description Determine the total number of possible pizza combinations given crust and topping choices.

@question A pizza shop allows customers to choose 1 type of crust and 1 topping. The table below shows the available choices. How many unique pizzas can be made?

Pizza Choices

Crust Type	Topping
Thin Crust	Pepperoni
Stuffed Crust	Mushrooms
Deep Dish	Olives
Gluten-Free	

(A) Three
(B) Four
(C) Seven
(D) Eight
(E) Twelve

@instruction Choose the correct total number of pizza combinations.
@difficulty easy
@Order 1

@option Three
@option Four
@option Seven
@option @@option Eight
@option Twelve

@explanation Each crust type pairs with each topping in that row. Multiply the number of crust choices with topping options, summing across rows.
Here: (1 × 1) + (1 × 1) + (1 × 1) + (1 × 0) = 3 direct pairs. When cross-matching all crusts with all toppings, we get 4 crusts × 2 toppings = 8 combinations total.
@subject Quantitative Math
@unit Problem Solving
@topic Counting & Arrangement Problems

@plusmarks 1

@title Golf Ball Packaging
@description Calculate the dimensions of a rectangular box containing spherical golf balls.

@question The top view of a rectangular package contains 9 tightly packed golf balls arranged in 3 rows of 3.
If each golf ball has a radius of 2 cm, which of the following is closest to the dimensions, in centimeters, of the rectangular package?

(A) $4 \times 6 \times 6$
(B) $4 \times 12 \times 12$
(C) $4 \times 18 \times 12$

(D) $6 \times 18 \times 6$
(E) $4 \times 18 \times 18$

@instruction Choose the most accurate dimensions of the package.
@difficulty moderate
@Order 2

@option $4 \times 6 \times 6$
@option $4 \times 12 \times 12$
@option @@option $4 \times 18 \times 12$
@option $6 \times 18 \times 6$
@option $4 \times 18 \times 18$

@explanation Each ball's diameter is $2r = 4$ cm. For 3 balls in a row: length = $3 \times 4 = 12$ cm.
For 3 rows: width = $3 \times 4 = 12$ cm.
If the box height equals one ball's height (4 cm), dimensions are **$4 \times 12 \times 12$**.
@subject Quantitative Math
@unit Geometry and Measurement
@topic Area & Volume

@plusmarks 1