

Name:

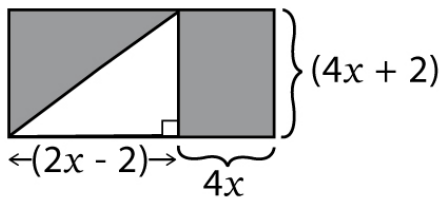
Polynomial Word Problems

- ① A rectangular swimming pool has a length of $(x + 6)$ units and a width of $(x - 2)$ units. Find the area of the pool.

- ② David is 4 years older than Chris. The product of their ages is 20 more than the sum of their ages. How old are Chris and David?

- ③ The length of a ping-pong table is 4 feet less than twice its width. The area of the table is 16 square feet. What are the dimensions of the table?

- ④ Write a polynomial in simplest form that will represent the area of the shaded region in the diagram below.



Polynomial Word Problems

Answers

- ① A rectangular swimming pool has a length of $(x + 6)$ units and a width of $(x - 2)$ units. Find the area of the pool.

Ans: $x^2 + 4x - 12$

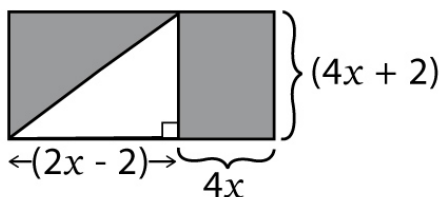
- ② David is 4 years older than Chris. The product of their ages is 20 more than the sum of their ages. How old are Chris and David?

Ans: Chris is 4 years old and David is 8 years old.

- ③ The length of a ping-pong table is 4 feet less than twice its width. The area of the table is 16 square feet. What are the dimensions of the table?

Ans: Length = 4 feet, breadth = 4 feet.

- ④ Write a polynomial in simplest form that will represent the area of the shaded region in the diagram below.



Ans: $20x^2 + 6x - 2$