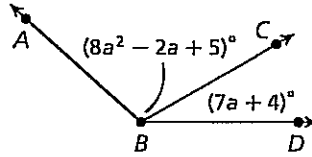


15. **Geometry** Write a polynomial that represents the measure of angle ABD .

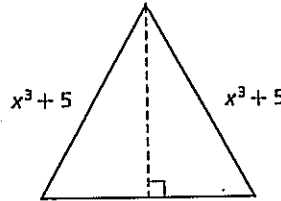


33. **Photography** The measurements of a photo and its frame are shown in the diagram. Write a polynomial that represents the width of the photo.

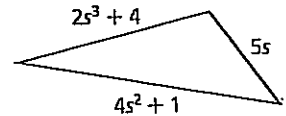


34. **Geometry** The length of a rectangle is represented by $4a + 3b$, and its width is represented by $7a - 2b$. Write a polynomial for the *area* of the rectangle.

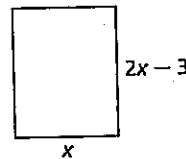
57. **Geometry** The legs of the isosceles triangle at right measure $(x^3 + 5)$ units. The perimeter of the triangle is $(2x^3 + 3x^2 + 8)$ units. Write a polynomial that represents the measure of the base of the triangle.



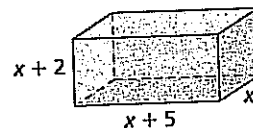
17. **Geometry** The measures of the sides of a triangle are shown as polynomials. Write a polynomial to represent the perimeter of the triangle.



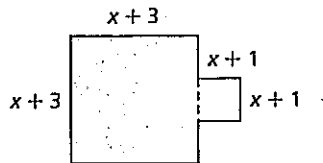
25. **Photography** The length of a rectangular photograph is 3 inches less than twice the width.
 a. Write a polynomial that represents the area of the photograph.
 b. Find the area of the photograph when the width is 4 inches.



84. **Geometry** Write a polynomial that represents the volume of the rectangular prism.

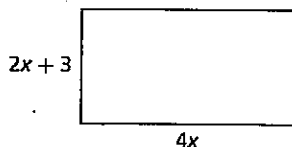


20. **Geometry** Write a polynomial that represents the area of the figure.

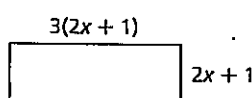


- Geometry** Write a polynomial that represents the area of each rectangle.

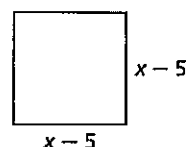
66.



67.



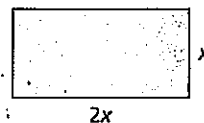
68.



69.

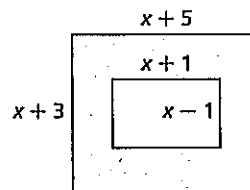
- Sports** The length of a regulation team handball court is twice its width.

- Write a polynomial that represents the area of the court.
- The width of a team handball court is 20 meters. Find the area of the court.



93. The diagram shows a sandbox and the frame that surrounds it.

- Write a polynomial that represents the area of the sandbox.
- Write a polynomial that represents the area of the frame that surrounds the sandbox.



94. **Geometry** The side length of a square is $(8 + 2x)$ units. The area of this square is the same as the perimeter of another square with a side length of $(x^2 + 48)$ units. Find the value of x .

56. **Extended Response** Tammy plans to put a wallpaper border around the perimeter of her room. She will not put the border across the doorway, which is 3 feet wide.

- Write a polynomial that represents the number of feet of wallpaper border that Tammy will need.
- A local store has 50 feet of the border that Tammy has chosen. What is the greatest whole-number value of x for which this amount would be enough for Tammy's room? Justify your answer.
- Determine the dimensions of Tammy's room for the value of x that you found in part b.

