## ALGEBRA RH

HW

1. A rectangular poster that is 12 inches by 4 inches is surrounded by a frame of uniform width. If the area of the photo and the frame is 180 square inches, find the width of the frame.
2. Mike wants to have a walkway installed around his rectangular pool. The pool is 4 feet longer than it is wide. The width of the walkway measures 8 feet. Together, the pool and the walkway cover an area of 572 square feet. Find the dimensions of the pool.
3. A rectangular patio that originally measured 5 feet by 10 feet was extended on one side each by $x$ feet. The area of the new, larger, L-shaped extension is 126 square feet. Find the value of x .

4. A uniform border on a framed photograph has the same area as the photograph. What are the outside dimensions of the border if the dimensions of the photograph are 25 cm by 20 cm ? Round answers to the nearest tenth.
