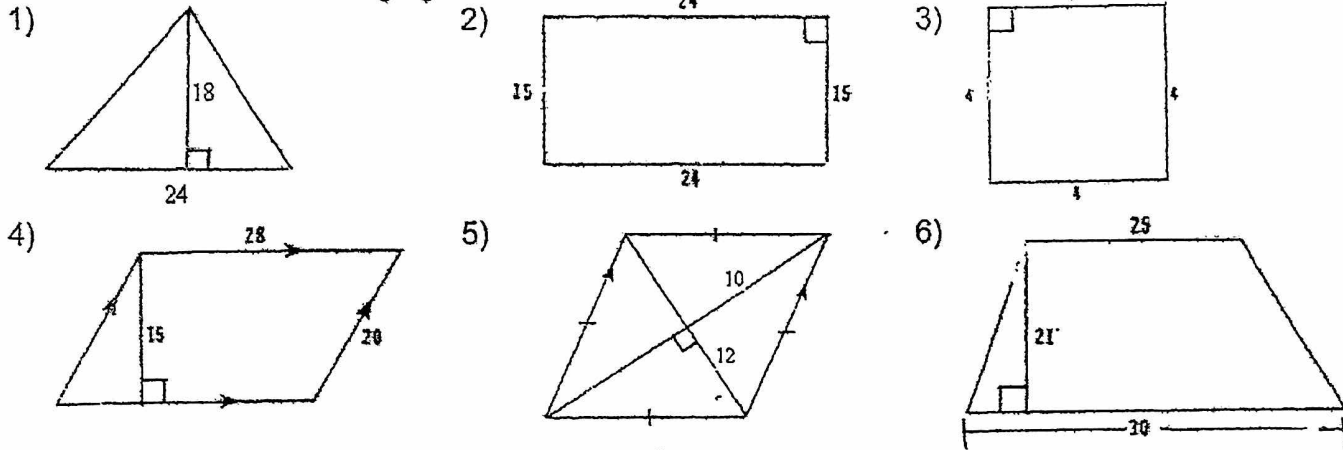


HW #11-3

Name: _____
Period: _____ #3

Work on your own paper. For each problem show all work to get your solution.

Find the area of the following figures.



- 7) The area of a trapezoid is 360 in^2 . The altitude is $12''$ and one base is $36''$. Find the other base.
- 8) Find the area of a parallelogram if a 45° angle is between sides of 22 ft and 36 ft .
**hint: find "h" using 45-45-90 Δ s*
- 9) The diagonal of a rectangle is 40 m and the length is 24 m . Find the area.
- 10) The area of a kite is 54 ft^2 and one diagonal is 12 ft . Find the other diagonal.
- 11) Find the area of a 30° - 60° - 90° triangle if its longest leg is 24 m .
- 12) The area of a square is 225 in^2 . Find its diagonal.
- 13) The area of a triangle is 30 cm^2 and its base is 12 cm . Find the height.
- 14) The area of a trapezoid is 288 ft^2 and its altitude is 16 ft . Find its bases if the larger base is twice the smaller base.
- 15) One angle of a rhombus is 120° and the perimeter is 96 m . Find the area.
**hint: find "h" using 30-60-90 Δ s*
- 16) The area of a parallelogram is 72 cm^2 and the sides are 18 cm and 24 cm . Find the longer altitude.
- 17) Find the area of a rhombus that contains a 60° angle and has a longer diagonal of 24 in .
- 18) The area of a kite is $294 \text{ sq}''$ and one diagonal is three times longer than the other diagonal. Find the lengths of the diagonals.
- 19) The area of a rectangle is 320 in^2 . If its length and width are in a ratio of 5 to 1, find the perimeter of the rectangle.
- 20) One side of a parallelogram is 24 ft and the altitude drawn to that side is 8 ft . Find the altitude drawn to an adjacent side if the length of the adjacent side is 20 ft .