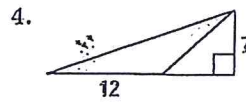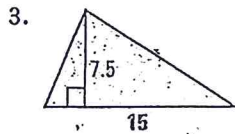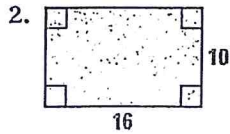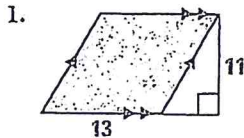# Math 2 Ch 11 Area Practice
Use the formula sheet when needed to solve each problem.

Find the area of the polygon.

1.
11
13

2.
10
16

3.
7.5
15

4.
7
12

Find the area of:

26. 7m

The lengths of the hypotenuse and one leg of a right triangle are given. Find the perimeter and area of the triangle.

5. Hypotenuse: 25 cm; leg: 20 cm

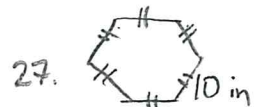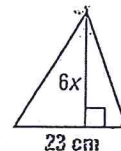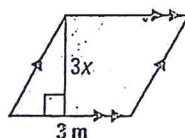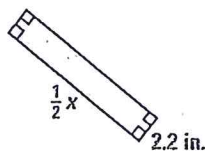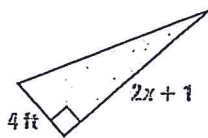6. Hypotenuse: 51 ft; leg: 24 ft

Find the value of x.

7. $A = 22$ ft^2

$2x + 1$
4 ft

8. $A = 14.3$ in.^{2}

$\frac{1}{2}x$
2.2 in.

9. $A = 7.2$ m^2

$3x$
3 m

10. $A = 276$ cm^2

$6x$
23 cm

27. 10 in

Find the area of the trapezoid.

11.
4
4
7

12.
12
10
21

13.
11
7
9

14.
18
9
6

28. ⊢ 6 in ⊣

29. 8m
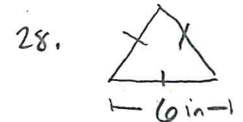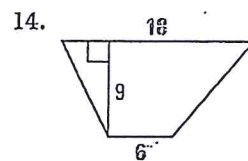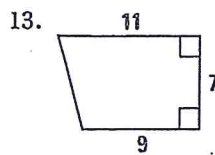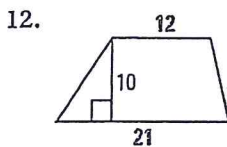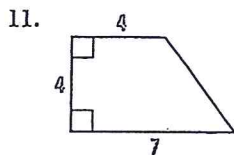
Find the area of the rhombus or kite.

15.
9
16

16.
11
11

17.
3
9

18.
2
4 2
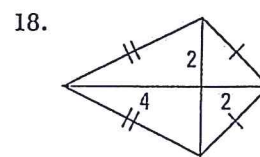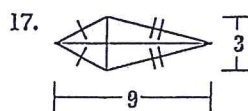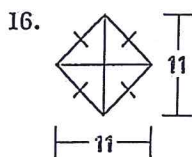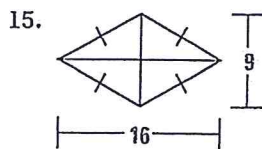
19. radius of a circle with a circumference of 42π meters

21. area of a circle with a diameter of 19.2 centimeters

20. circumference of a circle with a radius of 27 feet
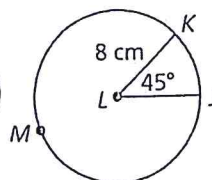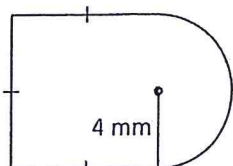
22. radius of a circle with an area of 1017.9 square meters

23. Find the length of $\stackrel{\frown}{KJ}$ and the area of sector KLJ (the smaller one)

8 cm
K
45°
L   J
M

24. Find the perimeter of the figure

4 mm

25. Find the area of the shaded region

10 cm
10 cm