

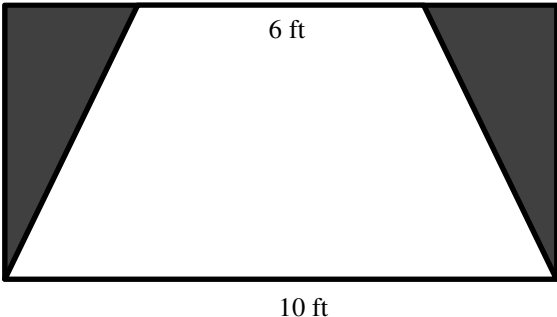
For full credit, show all work. Label all answers.

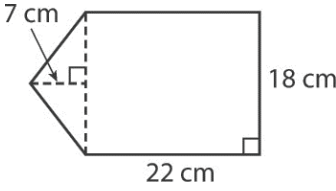
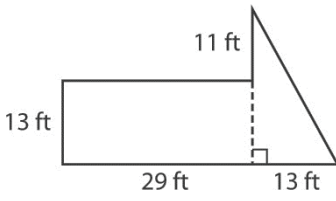
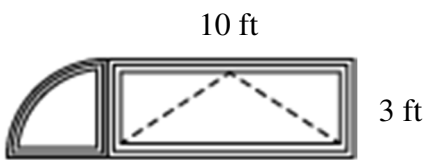
For all problems involving a formula you must show the formula and each step. **LABEL!**

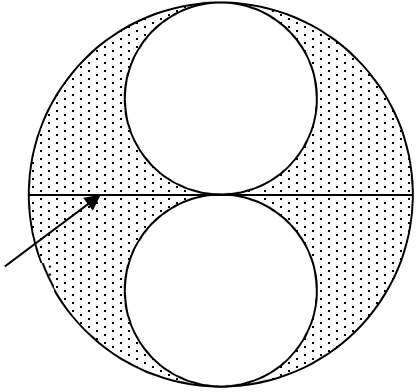
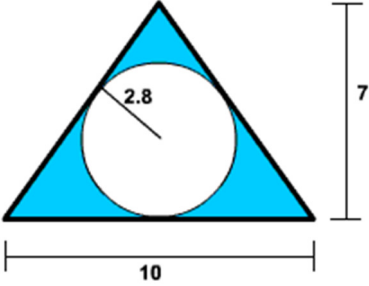
1. 2.	Find the area and perimeter of the following figure.		$P = 6\frac{7}{12} \text{ cm}$
			$A = 4\frac{1}{6} \text{ cm}^2$

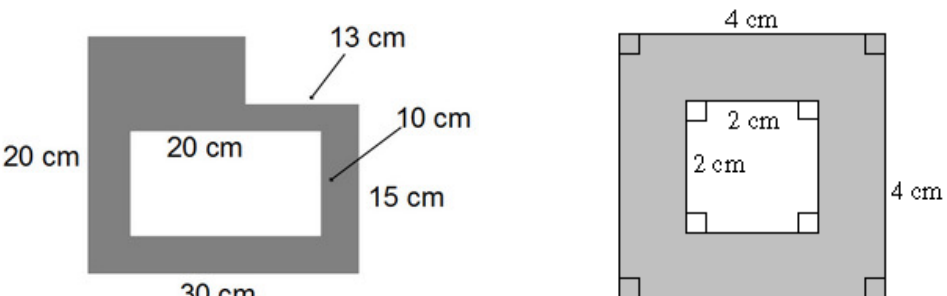
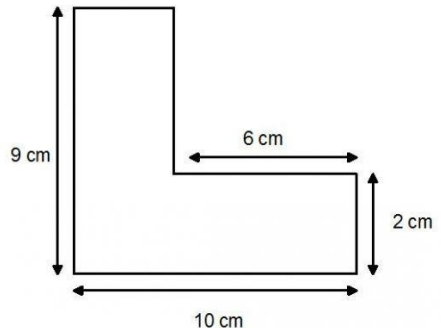
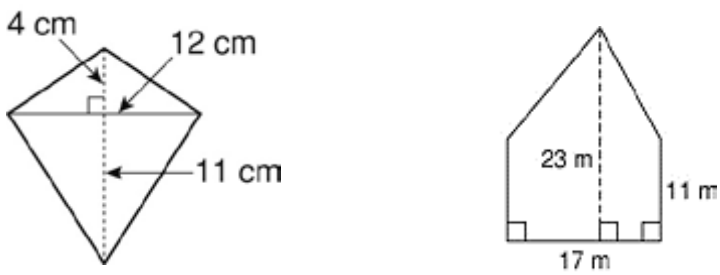
3.	Which of the following equations can be used to find the area of the shape at the right?		D
	<p>A $A = \frac{1}{2}(50 + 50) \cdot 15$ C $A = \frac{1}{2}(15 + 50) \cdot 60$</p> <p>B $A = \frac{1}{2}(60 + 50) \cdot 15$ D $A = \frac{1}{2}(15 + 50) \cdot 50$</p>		
4.	An equilateral triangle and a square have the same perimeter. The area of the square is 9 square inches. What is the length of one of the equilateral triangle's sides?	4 in	
5.	The area of a square is 289 sq.ft. What is the length of each side of the square?	17 ft	

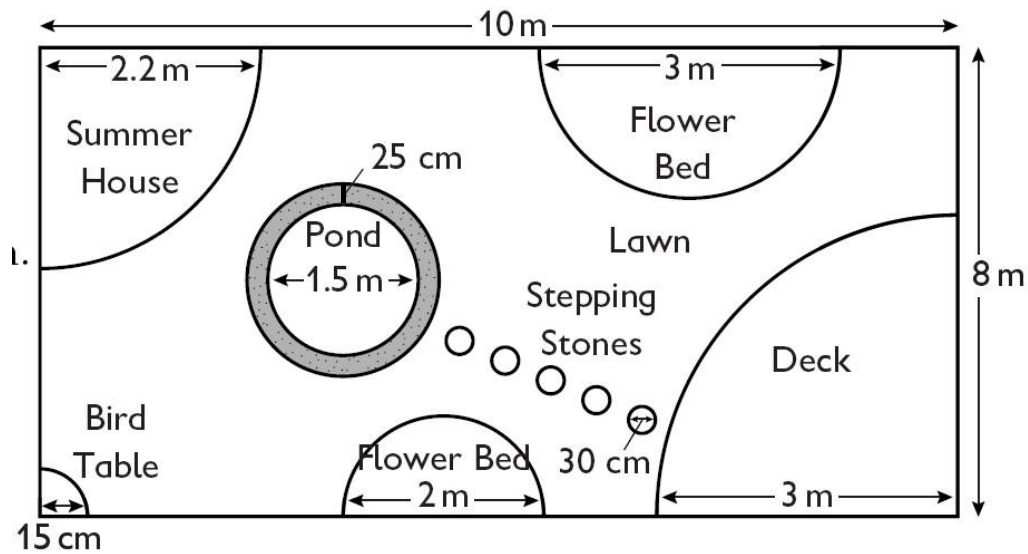
6.	A triangle has an area of 56 cm^2 . The base of triangle is 14 cm. and the height of the triangle is $(x + 2)$ cm. Write an area equation to first determine the value of x and then solve for the height of the triangle. Show all work in the box to the right.	EQUATION:	$A = \frac{1}{2}bh$
		SOLVE:	$56 = \frac{1}{2}(14)(x + 2)$ $56 = 7(x + 2)$ $56 = 7x + 14$ $42 = 7x$ $6 = x$
		HEIGHT:	height = 8 cm

7.	<p>If the length of each side on a rectangle is multiplied by 6, then the area of the new rectangle will...</p> <p>A be the same as the old area C be 36 times the old area B be six times the old area D be 12 times the old area</p>	C
8.	<p>A window is shaped like a parallelogram. The base is 16 inches long. The area is 608 square inches. What is the height of the window?</p>	38 in
9.	<p>Harry Potter wrote you a note:</p> <p style="text-align: center;">I'll meet you at Platform 9³/₄</p> <p>After that he drew the figures below.</p> <div style="text-align: center;">  </div> <p>Which equation can be used to determine A, the area of the shaded part of the figure in square inches?</p> <p>A $A = (4 \cdot 10) + \frac{1}{2}(6 + 10) \cdot 4$ C $A = (4 \cdot 10) - \frac{1}{2}(6 + 4) \cdot 10$ B $A = (4 \cdot 10) - \frac{1}{2}(6 + 10) \cdot 4$ D $A = (4 \cdot 10) - 2\left(\frac{1}{2} \cdot 6 \cdot 4\right)$</p>	B
10.	<p>In his living room, Rashad has a window shaped like a parallelogram. It is 7.2 feet high and has a base of 8.7 feet. The area of the window in Rashad's bedroom is one-third of the area of the window in the living room. What is the area of the bedroom window?</p> <p>A 10.44 ft² C 62.64 ft² B 20.88 ft² D 187.92 ft²</p>	B
11.	<p>Janet has a purse shaped like a trapezoid. One base is 10.2 inches, and the other base is 5.3 inches. The area is 46.5 square inches. What is the height of the purse?</p>	6 in

12.	<p>What is the area of the figure below?</p> 	459 cm ²
13.	<p>A painter designs a mural with the shape shown below. One pint of paint will cover 50 square feet. How many whole pints of paint will the painter need to paint the mural?</p> 	11 pints
14.	<p>Mr. Mangham is looking for a new window for his living room. He finds an interesting one at Home Depot with the shape below. What is the area of the window?</p> 	37.065 ft ²
15.	Pi represents the constant relationship between two specific parts of any circle regardless of the size. Name these two parts.	Circumference Diameter
16.	A circle has an area of $\frac{11}{14}$ yd ² . What is the circumference of the circle?	$\frac{22}{7}$ yd
17.	<p>The radius of a wheel is 4 cm. The wheel was rolled 400π cm. How many revolutions did the wheel make?</p> <p>Show your equation, all steps, and all work in the box at the right.</p>	$C = 2\pi r$ $C = 2\pi(4)$ $C = 8\pi$ $\frac{400\pi}{8\pi} = 50$
18.	What is the circumference of a circle with a radius of 31 feet?	$C = 194.68$ ft ²

19.	<p>Find the area of the dotted region.</p> <p>Show all work in the box to the right.</p>	 <p>$d = 40$ miles</p>	$A = \pi r_1^2 - 2\pi r_2^2$ $A = 3.14(20)^2 - 2\pi(10)^2$ $A = 1256 - 628$ $A = 628 \text{ mi}^2$
20.	<p>A baker is decorating the top of a round cake with cherries. The diameter of the cake is 9.5 inches. Each cherry is 0.75 inches in diameter. About how many cherries will the baker need to decorate the perimeter of the top of the cake?</p> <p>A 14 B 19 C 29 D 39</p>		D
21.	<p>A restaurant makes thin-crust pizzas that are 14 inches in diameter. Each square inch of pizza contains 14.04 calories. The restaurant owner wants each slice of pizza to contain 270 calories. About how many slices should each pizza be cut into?</p>		8
22.	<p>Josh's roof is triangular. It has a base of 97.2 feet and a height of 17.5 feet. Josh's neighbor's roof has an area of 942 square feet. What is the difference in area between Josh's roof and his neighbor's?</p>		91.5 ft ²
23.	<p>A tennis court for singles play is 79 feet long and 32 feet wide. The court for doubles play is 12 feet wider and 2 feet longer. How much more area is covered by the tennis court for doubles play?</p>		1036 ft ²
24.	<p>The height of a trapezoid is 8 in. and its area is 96 in². One base of the trapezoid is 6 inches longer than the other base. What are the lengths of the bases?</p>		9 in
			15 in
25.	<p>A right triangle has an area of 18 square inches. If the triangle is an isosceles triangle, what are the lengths of the two congruent sides of the triangle?</p>		6 in
26.	<p>Find the area of the shaded region of composite shape.</p> 		10.3824 un

27. 28.	<p>Find the area of the shaded region of each composite shape below.</p> 	335 cm
		12 cm
29.	<p>A piece of cardboard is cut in an L-shape shown to the right. Find the total area of the cardboard.</p> 	48 cm
30.	<p>Donna makes a round pizza. She wants to put a layer of cheese on the pizza. If the pizza is 8 cm in diameter, how many square centimeters of cheese does she need to put on the pizza?</p>	50.24 cm ²
31.	<p>A clock's minute hand is 7.0 inches long. How much area does it sweep in 1 hour?</p>	153.86 in ²
32. 33.	<p>What is the area of each polygon below?</p> 	90 cm ²
		289 m ²
34.	<p>Charles has a circular carpet in his drawing room. He wants to put a circular table in middle of the carpet. The diameter of the carpet is 12 meters and the diameter of the table is 4 meters. Calculate the area of the visible carpet after the table is placed.</p>	100.48 m ²



35.	The diagram above is of Mrs. Fauatea's backyard. How much larger is the entire area of the backyard compared to the area of the deck?	72.935 m ²
36.	What is the outer circumference of the gravel (gray area) around the pond in meters?	6.28 m
37.	What is the total area of the stepping stones in centimeters?	3,532.5 cm ²

