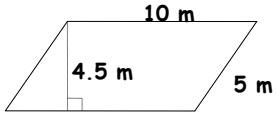
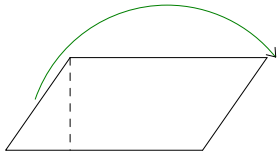
Area
~ 1 ~

1. Find the area of a parallelogram with these dimensions.

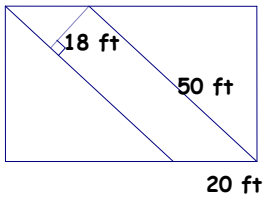


2. If you cut the end of this parallelogram at the dashed line and move it to the other end, how will this change the shape of the polygon?



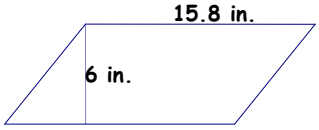
3. How will this movement affect the method used to find the area?

4. This new carpet design involves a parallelogram of red carpet.

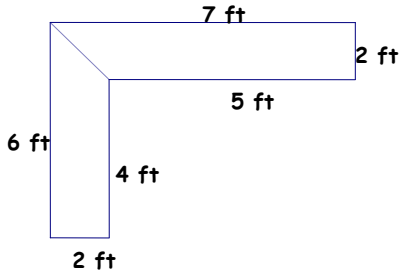


What is its area?

5. Find the area of a parallelogram with an altitude of 6 in. and a length of 15.8 in.



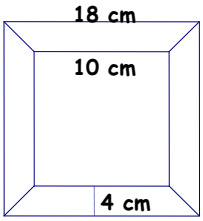
Your design budget for a new L-shaped countertop is $200. The granite countertop material is $10 per square foot. (6-7)



6. Are you over or under budget?

7. By how much?

8. Find the area of this square frame.

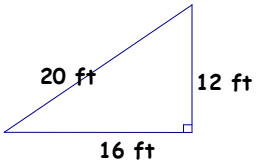


Find the area of these trapezoidal figures. (9 – 10)

9. $base_1$ = 40 mm, $base_2$ = 82 mm, height = 3 mm.

10. small base = $2\frac{1}{2}$ ft, large base = 9 ft, altitude = 4 ft.

11. Find the area of the garden.

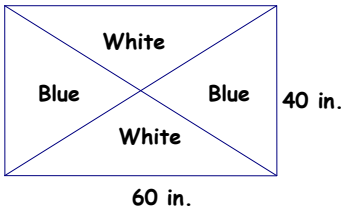


Find the area of these triangles. (12 – 13)

12. base = 14 m, height = 1.5 m

13. base = 25 yds, altitude = 10 yds

14. Jody makes a family flag which is blue and white.



How much blue material will be used to make the flag?

15. How does doubling the length of a rug affect its area?

16. This sheet of paper is $8\frac{1}{2}$ in. wide and 11 in. long. What is the area?

17. The ceiling in Mrs. Johnson's rectangular classroom is 35 ft long and 30 ft wide. How many 1 ft square ceiling tiles would cover the class' ceiling?

18. A rectangular cafeteria table is 10 ft long and 4 ft wide. How much space would each child have if eight kids sat down (evenly spaced)?

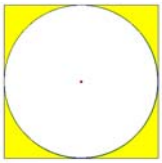
19. A rancher has 80 yds of fence. He wishes to create a 4-sided pen for his livestock. What would be the dimensions of the largest one he could create?

20. What is the length of a rectangle with a width of 13.5 km and an area of 1,053 km^2?

21. A crop circle that has a width of 20 yds appears in a wheat field. What is the area of the circle that aliens allegedly created? (round to nearest square yard)

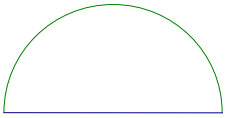
22. Owners tethered Fido to a pole. If Fido does not tangle his 15 ft chain, how many sq ft can he utilize? (round to nearest tenth of a sq ft)

23. Pizza Hut training videos mandate that workers should put the largest possible pizza in each square pizza box. If they put a 12" diameter pizza in a 12" box, what is the square area of the leftover cardboard? (on the bottom of the box) (Round to nearest whole inch)



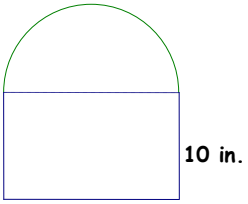
12 in.

24. A solid-plastic protractor has a six inch straight edge. What is the area of the protractor? (Round to nearest tenth)



6 in.

25. Use $\pi = \frac{22}{7}$ in the formula to find the area of this figure:



26. Which of the following does not belong?

A. π
B. 3.14
C. $\frac{22}{7}$
D. *radius*
E. $\frac{circumference}{diameter}$

27. Match these formulas with their figures:

I. Circle	a. $A = \frac{1}{2}(b_1 + b_2)h$
II. Rectangle	b. $A = bh$
III. Parallelogram	c. $A = \frac{1}{2}bh$
IV. Trapezoid	d. $A = lw$
V. Square	e. $A = \pi r^2$
VI. Triangle	f. $A = s^2$