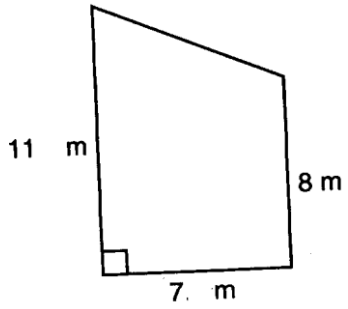
Name:

Chapter 11 Review

Find the exact perimeter and exact area.

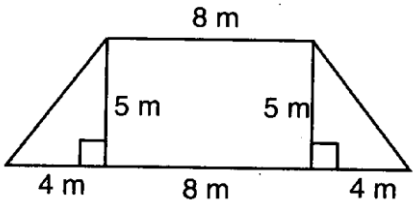
1.



$P = 26 + \sqrt{58}$ m

$A = 66.5$ m^2

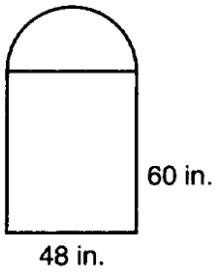
2.



$P = 24 + 2\sqrt{41}$ m

$A = 60$ m^2

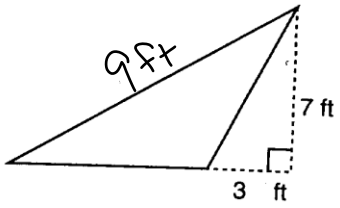
3.



$P = 168 + 24\pi$ in

$A = 2880 + 288\pi$ in^2

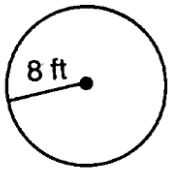
4.



$P = 6 + 4\sqrt{2} + \sqrt{58}$ ft

$A = 14\sqrt{2} - \frac{21}{2}$ ft^2

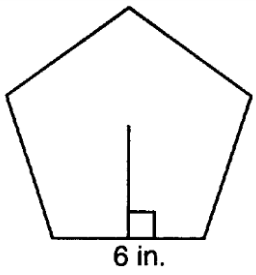
5.



$P = 16\pi$ ft

$A = 64\pi$ ft^2

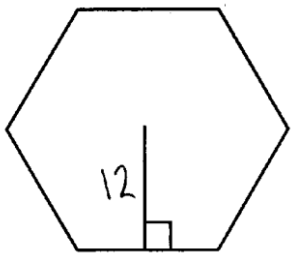
6.



$P = 30$ in

$A = 61.9$ in^2

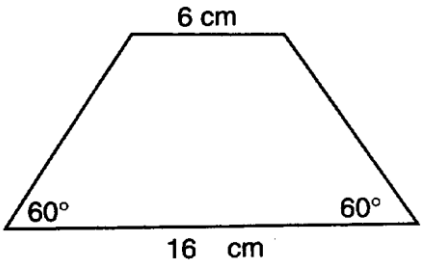
7.



$P = 48\sqrt{3}$ units

$A = 288\sqrt{3}$ units^2

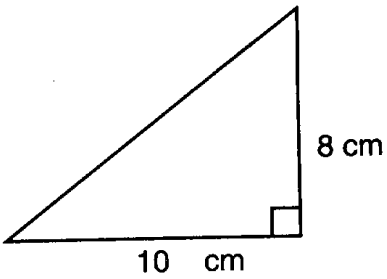
8.



$P = 42$ cm

$A = 55\sqrt{3}$ cm^2

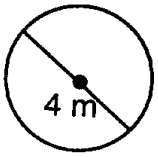
9.



$P = 18 + 2\sqrt{41}$ cm

$A = 40$ cm^2

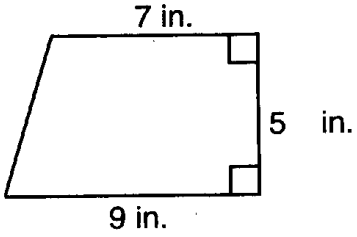
10.



$P = 4\pi$ m

$A = 4\pi$ m^2

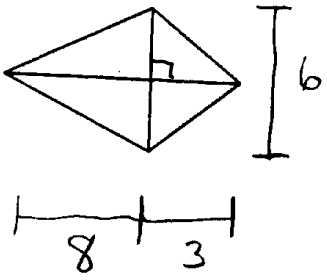
11.



$P = 21 + \sqrt{29}$ in

$A = 40$ in^2

12.

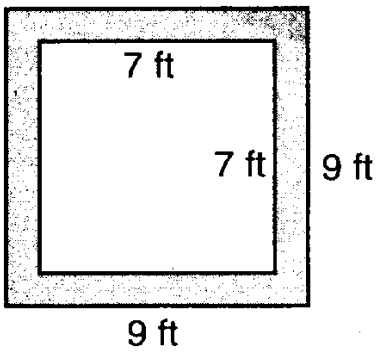


$P = 2\sqrt{73} + 6\sqrt{2}$ units

$A = 33$ units^2

Find the perimeter and area of the shaded region.

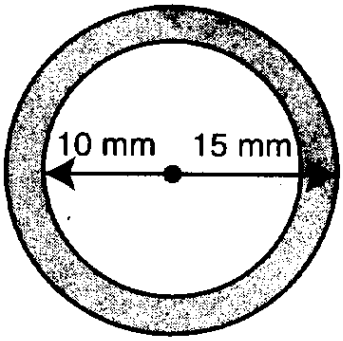
13.



$P = 64$ ft

$A = 32$ ft^2

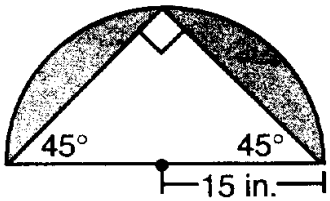
14.



$P = 50\pi$ mm

$A = 125\pi$ mm^2

15.



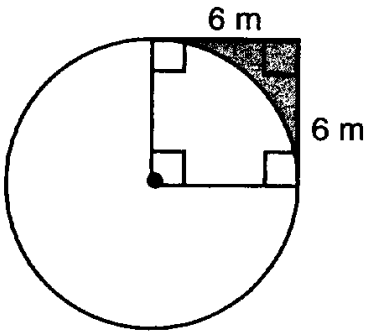
$P = 15\pi + 30\sqrt{2}$ in

$A = \frac{225}{2}\pi - 225$ in^2

or

$= 112.5\pi - 225$ in^3

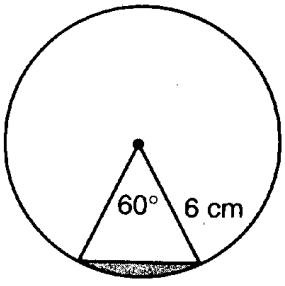
16.



$P = 12 + 3\pi$ m

$A = 36 - 9\pi$ m^2

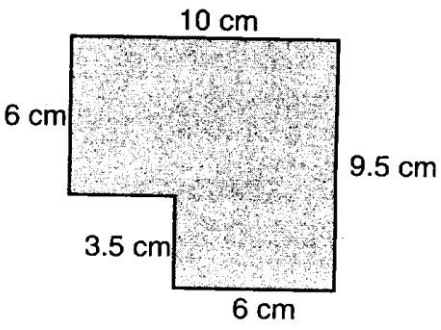
17.



$P = 6 + 2\pi$ cm

$A = 6\pi - 9\sqrt{3}$ cm^2

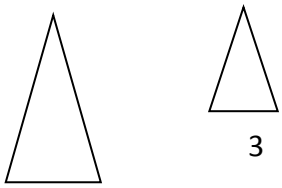
18.



$P = 39$ cm

$A = 81$ cm^2

19. Find the ratio of the sides, perimeter and area of the given similar figures.



Sides: $\frac{5}{3}$

Perimeters: $\frac{5}{3}$

Areas: $\frac{25}{9}$

20. You are comparing the two similar rugs shown below. The price of the small rug is $84. Assuming the cost remain constant, what is the price of the larger rug?

4 feet

10 feet

$525

21. Regular hexagon *ABCDEF* has a side length of 8 millimeters and an area of $96\sqrt{3}$ square millimeters. Regular hexagon *JKLMNO* has a perimeter of 72 millimeters. Find its area.

$216\sqrt{3}$ mm^2