NAME: _____ DATE: _____

CIRCLES & AREA PERIOD: _____

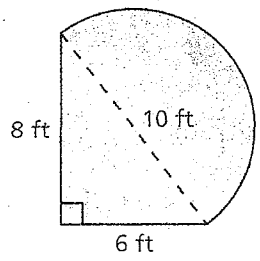
How Do You Find the Perimeter of Composite Shapes?

(Topic #8)

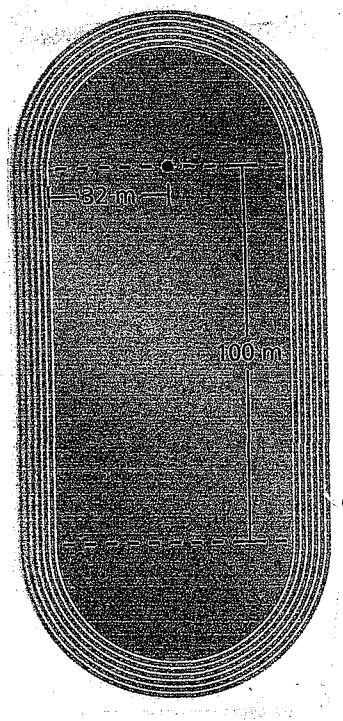
To find the perimeter of a composite figure, find the distance around the figure.

EXAMPLE 1: Finding the Perimeter of Composite Figures

a) The figure is made up of a semicircle and a triangle. Find the perimeter.

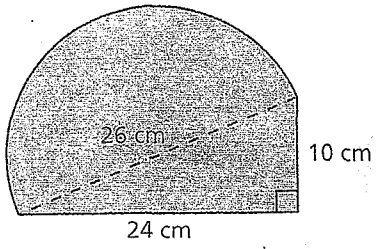


b) The running track is made up of a rectangle and two semicircles. Find the perimeter.

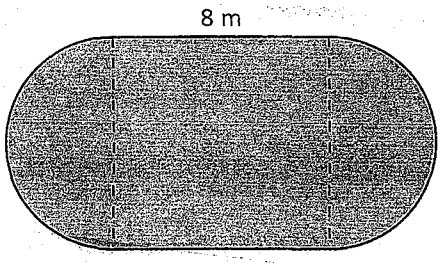


PRACTICE: Find the area of the figure. *Show all work.*

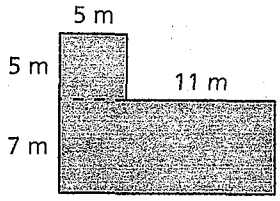
1. The figure is made up of a semicircle and a triangle. Find the perimeter.



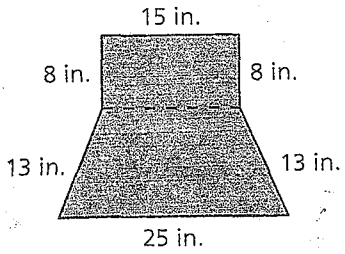
2. The figure is made up of a square and two semicircles. Find the perimeter.



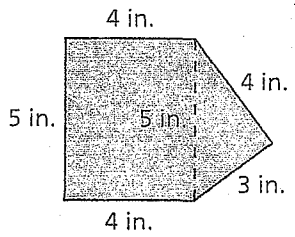
3. Find the perimeter.



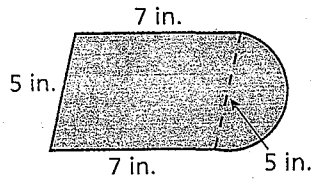
4. Find the perimeter.



5. Find the perimeter.



6. Find the perimeter.



NAME: _____ DATE: _____

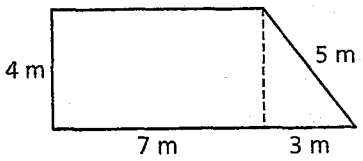
CIRCLES & AREA PERIOD: _____

HOMEWORK - (Topic #8)

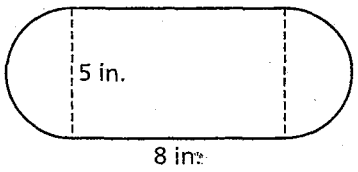
Finding the Perimeter of a Composite Figure

Find the perimeter of the figure.

1.

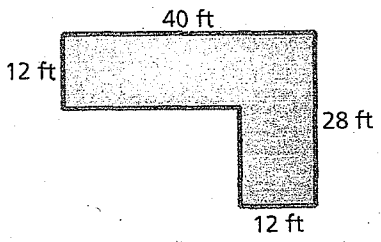


2.



3. You are having a swimming pool installed.

a) Find the perimeter of the swimming pool.



b) Tiling costs $15 per yard. How much will it cost to put tiles along the edge of the pool?

NAME: KEY DATE:

CIRCLES & AREA PERIOD: ✓

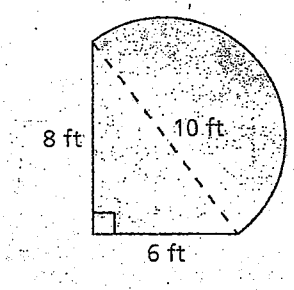
How Do You Find the Perimeter of Composite Shapes?

(Topic #8)

To find the perimeter of a composite figure, find the distance around the figure.

EXAMPLE 1: Finding the Perimeter of Composite Figures

a) The figure is made up of a semicircle and a triangle. Find the perimeter.



Distance Around Δ

$P = 8 + 6$

$P = 14$

Distance Around Semi ⊙

$C = \frac{1}{2} \pi d$

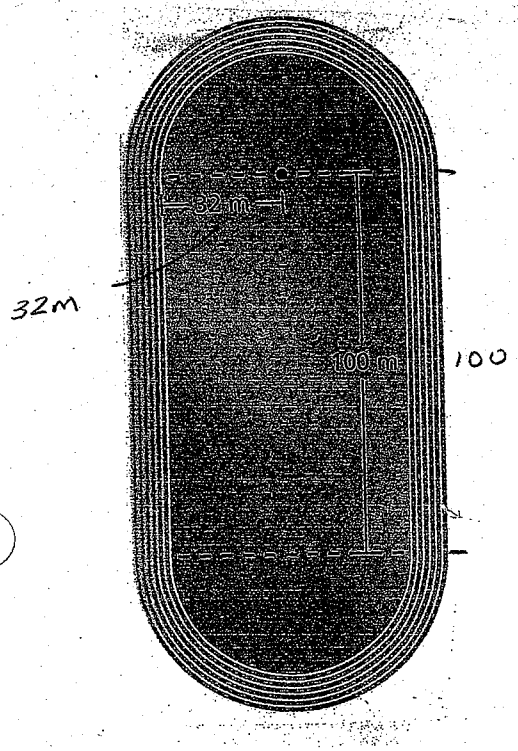
$C = \frac{1}{2} \pi (10)$

$C = 15.71$

Total = 14 + 15.71

= 29.71 ft

b) The running track is made up of a rectangle and two semicircles. Find the perimeter.



Distance Around ⊙

$C = 2 \pi r$

$C = 2 \pi (32)$

$C = 201.06$

Distance Around Rect

$P = 100 + 100$

$P = 200$

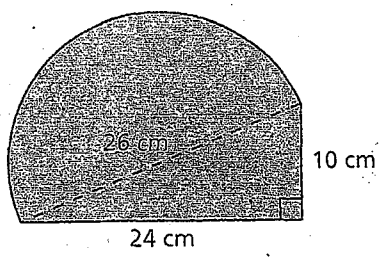
Total = 201.06 + 200

= 401.06 m.

perimeter

PRACTICE: Find the ~~area~~ of the figure. *Show all work.*

1. The figure is made up of a semicircle and a triangle. Find the perimeter.



Distance around semi ⊙

$C = \frac{1}{2}\pi d$

$C = \frac{1}{2}\pi(26)$

$C = 40.84$

Perimeter △

$P = 10 + 24$

$P = 34$

Total = 40.84 + 34

= 74.84 cm

2. The figure is made up of a square and two semicircles. Find the perimeter.

Distance ⊡

$P = 8 + 8$

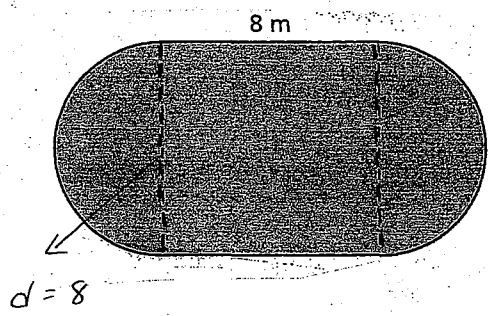
$P = 16$

Distance ⊙

$C = \pi d$

$C = \pi(8)$

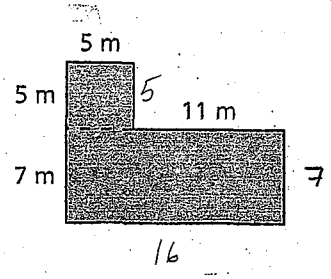
$C = 25.13$



Total = 16 + 25.13

= 41.13 m

3. **Find the perimeter.**



Distance ⊞

$P = 5 + 5 + 5$

$P = 15$

Distance ▭

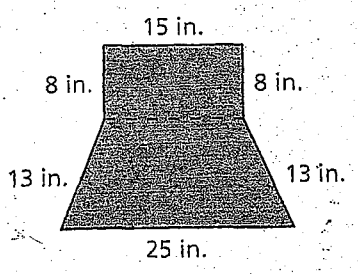
$P = 11 + 7 + 16 + 7$

$P = 41$

Total = $15 + 41$

$= 56$ m

4. **Find the perimeter.**



Distance ▭

$P = 8 + 15 + 8$

$P = 31$

Distance ⏢

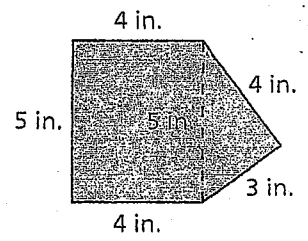
$P = 13 + 25 + 13$

$P = 51$

Total = $31 + 51$

$= 82$ in

5. **Find the perimeter.**



Distance □

$P = 4 + 5 + 4$

$P = 13$

Distance △

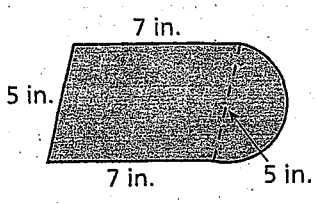
$P = 4 + 3$

$P = 7$

Total = 13 + 7

= 20 in

6. **Find the perimeter.**



Distance ▱

$P = 7 + 5 + 7$

$P = 19$

Distance Semi ○

$C = \frac{1}{2} \pi d$

$C = \frac{1}{2} \pi (5)$

$C = 7.85$

Total = 19 + 7,85

= 26.85 in

NAME: KEY
CIRCLES & ~~AREA~~

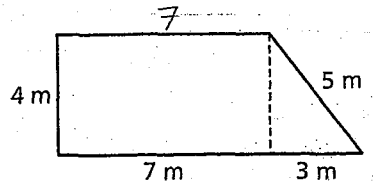
DATE: _____
PERIOD: _____

HOMEWORK - (Topic #8)

Finding the Perimeter of a Composite Figure

Find the perimeter of the figure. Hundredth

1.



Rectangle

$P = 7 + 4 + 7$

$P = 18$

Triangle

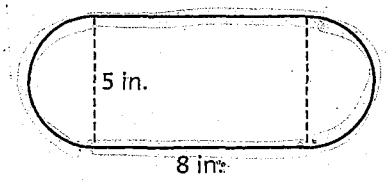
$P = 5 + 3$

$P = 8$

Total = $18 + 8$

$= 26$ m

2.



Rectangle

$P = 8 + 8$

$P = 16$

Circle

$C = \pi d$

$C = \pi (5)$

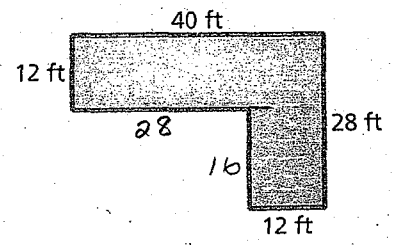
$C = 15.71$

Total = $16 + 15.71$

$= 31.71$ in

3. You are having a swimming pool installed.

a) Find the perimeter of the swimming pool.



Rectangle

$P = 28 + 12 + 40$

$P = 80$

Rectangle

$P = 28 + 12 + 16$

$P = 56$

TOTAL = $80 + 56$

$= 136$ ft

b) Tiling costs $15 per yard. How much will it cost to put tiles along the edge of the pool?

$\frac{136 \text{ ft}}{3} = 45.\overline{3}$ yd

$\$ = 45.\overline{3}\ (15)$

$= \$680$