#5

$(x-h)^2+(y-k)^2=r^2$ center is (h,k) radius is r

Determine the coordinates of the center and the measure of the radius for each circle whose equation is given.

1. $(x-7.2)^2+(y+3.4)^2=14.44$

center = $(7.2, -3.4)$

radius = $\sqrt{14.44} = 3.8$

2. $\left(x+\frac{1}{2}\right)^2+(y-2)^2=\frac{16}{25}$

center = $\left(-\frac{1}{2}, 2\right)$

Radius = $\sqrt{\frac{16}{25}} = \frac{4}{5}$

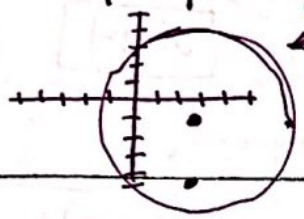
~~10-8~~

9-7

3. $(x-6)^2+(y-3)^2-25=0$

$+25 \quad +25$

center = $(6,3)$ radius = $\sqrt{25} = 5$

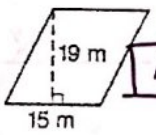


Graph each circle whose equation is given. Label the center and measure of the radius on each graph.

4. $(x-2.5)^2+(y+1)^2=12.25$

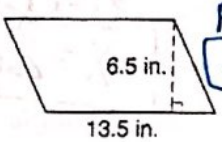
center = $(2.5, -1)$ radius = 3.5

Find the area of each figure.

1. 

$A = 15 \cdot 19$

$A = 285 m^2$

2. 

$A = 13.5 \cdot 6.5$

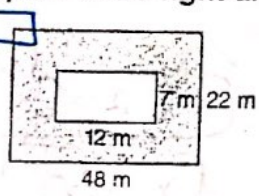
$A = 87.75 in^2$

Find the area of each shaded region. Assume that angles that appear to be right are right angles.

~~11-1~~

10-1

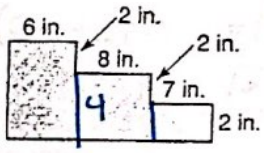
Bg □ - small □

3. 

$48 \cdot 22 - 12 \cdot 7$

$1056 - 84$

$972 m^2$

5. 

$6 \cdot 6 + 8 \cdot 4 + 7 \cdot 2$

$36 + 32 + 14$

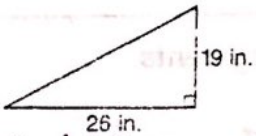
$82 in^2$

Find the area of each figure.

~~11-2~~

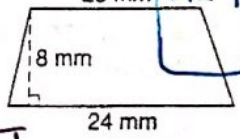
10-1

10-2

1. 

$A = \frac{1}{2}bh$

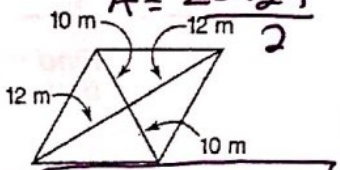
$A = \frac{1}{2}(26)(19) = 247 in^2$

2. 

$A = \frac{1}{2}(b_1+b_2)h$

$A = \frac{1}{2}(20+24)8$

$A = 176 mm^2$

3. 

$A = \frac{d_1 \cdot d_2}{2}$

$A = \frac{20 \cdot 24}{2}$

$A = 240 m^2$

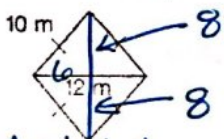
$6^2+x^2=10^2$

$36+x^2=100$

$-36 \quad -36$

$x^2=64$

$x=8$

4. 

$A = \frac{1}{2}d_1d_2$

$A = \frac{1}{2}(16)(12) = 96 m^2$

$15^2+b^2=25^2$

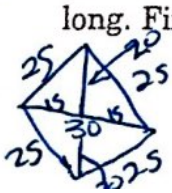
$225+b^2=625$

$-225 \quad -225$

$b^2=400$

$b=20$

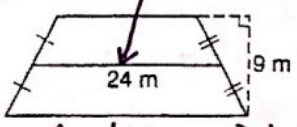
8. A rhombus has a perimeter of 100 meters and a diagonal 30 meters long. Find the area of the rhombus.



$A = \frac{1}{2}d_1d_2$

$A = \frac{1}{2}(30)(40)$

$A = 600 m^2$

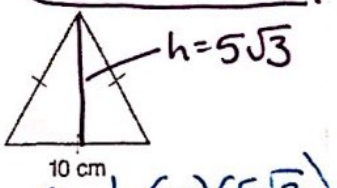
5. 

$m = \frac{1}{2}(b_1+b_2)$

$A = \frac{1}{2}(b_1+b_2)h$

$A = 24 \cdot 9$

$A = 216 m^2$

6. 

$A = \frac{1}{2}(10)(5\sqrt{3})$

$A = 43.3 cm^2$

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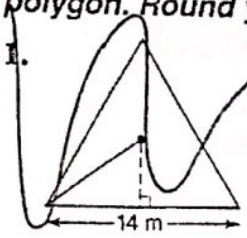
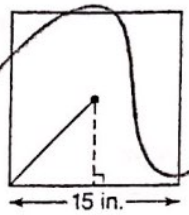
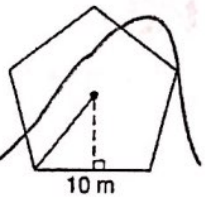
#6 Geom CP Spring Review

11-3
10-3

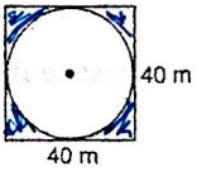
Find the apothem, area, and perimeter of each regular polygon. Round your answers to the nearest tenth.

1. 

2. 

3. 

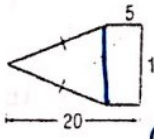
Find the area of each shaded region. Assume that all polygons are regular. Round your answers to the nearest tenth.

6. 

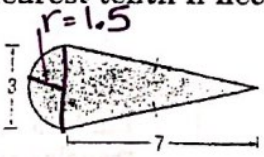
Area = □ − ○
$= 40^2 - \pi(20)^2$
$= 343.4\ m^2$

11-4
10-4

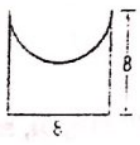
Find the area of each figure. Round to the nearest tenth if necessary.

1. 

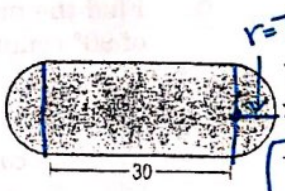
Area = △ + □
$= \frac{1}{2}(12)(15) + 5(12)$
$= 90 + 60$
A = 150

2. 

A = △ + ⌓
$= \frac{1}{2}(3)(7) + \frac{\pi \cdot 1.5^2}{2}$
$= 10.5 + 1.125\pi$
F14.03

3. 

A = □ − ⌓
$8 \cdot 8 - \frac{\pi(4^2)}{2}$
$64 - 8\pi$
A = 38.9

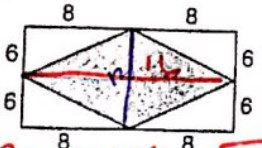
4. 

A = □ + ○
$A = 30(15) + \pi \cdot 7.5^2$
A = 626.7

Ch 12
-5

Find the probability that a point chosen at random in each figure lies in the shaded region. Round your answers to the nearest hundredth.

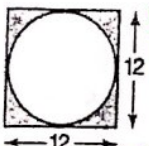
Sector
$\frac{360-120}{360}$ #97

5. 

Rhombus
$\frac{1}{2} d_1 \cdot d_2$
$\frac{1}{2}(12)(16)$
$= 96$

Rectangle
$12 \cdot 16$
$= 192$

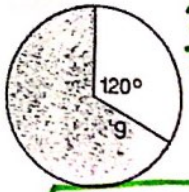
Probability = $\frac{96}{192} = .5$ 50%

6. 

Square
$12 \cdot 12 =$
144

Circle πr^2
$\pi \cdot 6^2 = 113.04$

Probability
$\frac{144 - 113.04}{144}$
21.5%

7. 

$\frac{240}{360}$

66.7%

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