SECTION IV

① $(x--2)^2+(y--8)^2=5^2$

$(h,k)=(-2,-8)$

$r=5$

② $(x-0)^2+(y-5)^2=10^2$

$(h,k)=(0,5)$

$r=10$

③ $(h,k)=(-3,7)$ thru $(0,0)$

$r^2=(0--3)^2+(7-0)^2$

$r^2=3^2+7^2$

$r^2=9+49$

$r^2=58$

$(x--3)^2+(y-7)^2=58$

$(x+3)^2+(y-7)^2=58$

SECTION V

① $\frac{45}{360}\cdot\frac{\pi(16)^2}{1}=\frac{1}{8}\cdot\frac{256\pi}{1}=\frac{256\pi}{8}=32\pi\ ft^2$

② a) $A_{RECTANGLE}=50(12)=600$

A_{CIRCLE} $r=12/2=6$ $A=\pi(6)^2=36\pi$

$A_{SHADED}=600-36\pi\approx 486.9\ ft^2$

b) $C=\pi(12)=12\pi\ ft$