

p. 501  
p49  
2a) Given:  $C = 56\pi$   
Find  $r$ .

$$C = 2\pi r$$

$$\frac{56\pi}{2\pi} = \frac{2\pi r}{2\pi}$$

$$28.00 = r \checkmark$$

3c)  $r = 10$   
Arc =  $60^\circ$   
length arc =  $\frac{mArc}{360} \cdot 2\pi r$

$$= \frac{60}{360} \cdot 2\pi(10)$$

$$= \frac{60 \cdot 2\pi(10)}{360}$$

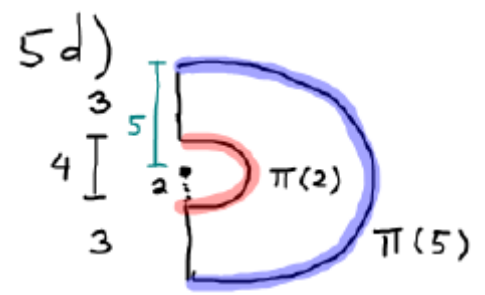
$$= \frac{20\pi}{6} = \frac{10\pi}{3} \checkmark$$

2d)  $C = 88$   
Find  $r$

$$C = 2\pi r$$

$$\frac{88}{2\pi} = \frac{2\pi r}{2\pi}$$

$$14.01 = r \checkmark$$



$3 + 3 = 6$   
Half  $C = \frac{2\pi r}{2} = \pi r$   
 $6 + 2\pi + 5\pi = \boxed{6 + 7\pi} \checkmark$

Inside  
Full  $C = 2\pi(5) = 10\pi$   
Final  $10\pi + 40 \approx \boxed{71.4 \text{ m}} \checkmark$

Outside  
Full  $C = 2\pi(9) = 18\pi$   
Final  $18\pi + 40 \approx \boxed{96.5 \text{ m}} \checkmark$



Circ of spool  
 $C = 2\pi r = 2\pi(2) = 4\pi$   
 $r = 2$   
 $100 \cdot 4\pi \approx \boxed{1257 \text{ cm}} \checkmark$

