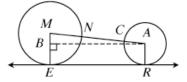
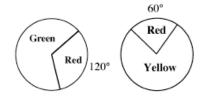


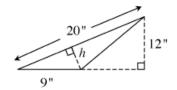
10-48. In the diagram at right,  $\bigcirc M$  has radius 14 feet and  $\bigcirc A$  has radius 8 feet.  $\overrightarrow{ER}$  is tangent to both  $\bigcirc M$  and  $\bigcirc A$ . If NC = 17 feet, find ER.



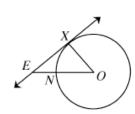
10-49. Phinneus is going to spin both spinners at right once each. If he lands on the same color twice, he will go to tonight's dance. Otherwise, he will stay home. What is the probability that Phinneus will attend the dance?



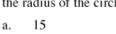
10-50. In the figure at right, find the interior height (*h*) of the obtuse triangle. Show all work.



- 10-51. A cylinder with volume  $500\pi$  cm<sup>2</sup> is similar to a smaller cylinder. If the scale factor is  $\frac{1}{5}$ , what is the volume of the smaller cylinder? Explain your **reasoning**.
- 10-52. In the figure at right,  $\overrightarrow{EX}$  is tangent to  $\odot O$  at point X. OE = 20 cm and XE = 15 cm.



- a. What is the area of the circle?
- b. What is the area of the sector bounded by  $\overline{OX}$  and  $\overline{ON}$ ?
- c. Find the area of the region bounded by  $\overline{XE}$ ,  $\overline{NE}$ , and  $\widehat{NX}$ .
- 10-53. **Multiple Choice:** In the circle at right,  $\overline{CD}$  is a diameter. If AE = 10, CE = 4, and AB = 16, what is the radius of the circle?



b. 16

c. 18

d. 19

e. None of these

