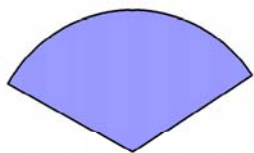


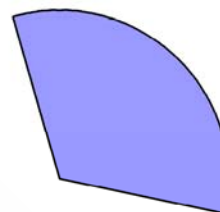
Similar Circles

1. Both sectors have the same central angle measure of 118 degrees. The scale factor of sector 1 to sector 2 is $\frac{17}{20}$. If the area of sector 2 is 1646.76 square yards, what is the area of sector 1 to the nearest square yard? Use 3.14 as an approximation for pi.

Sector 1

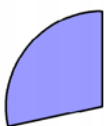


Sector 2



2. Both sectors have the same central angle measure of 102 degrees. The scale factor of sector 1 to sector 2 is 1. If the area of sector 2 is 88.97 square inches, what is the radius of the circle with sector 1 to the nearest inch? Use 3.14 as an approximation for pi.

Sector 1

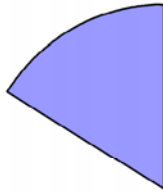


Sector 2



3. Both sectors have the same central angle measure of 58 degrees. The scale factor of sector 1 to sector 2 is $\frac{24}{11}$. If the area of sector 2 is 61.21 square meters, what is the diameter of the circle with sector 1 to the nearest meter? Use 3.14 as an approximation for pi.

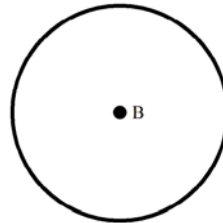
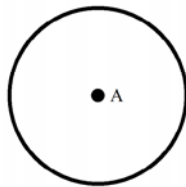
Sector 1



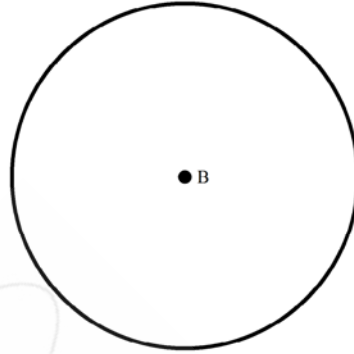
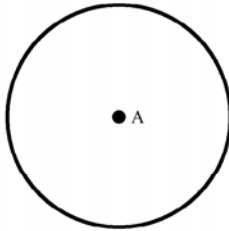
Sector 2



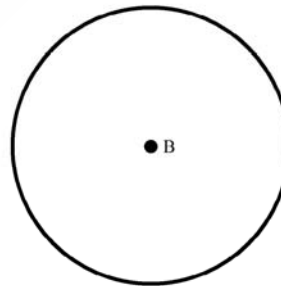
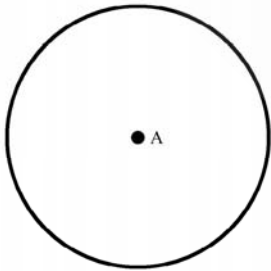
4. The scale factor of circle A to circle B is $\frac{19}{23}$. If the area of circle A is 1,133.54 square inches, what is the area of circle B to the nearest square inch? Use 3.14 as an approximation for pi.



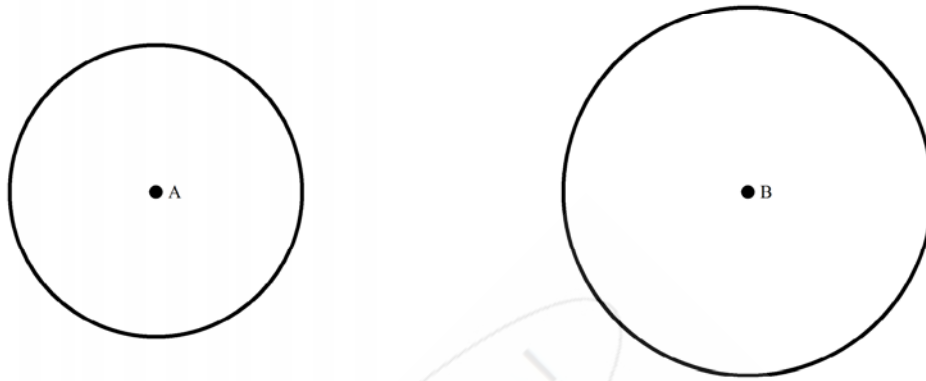
5. The scale factor of circle A to circle B is $\frac{9}{14}$. If the area of circle A is 254.34 square inches, what is the radius of circle B to the nearest inch? Use 3.14 as an approximation for pi.



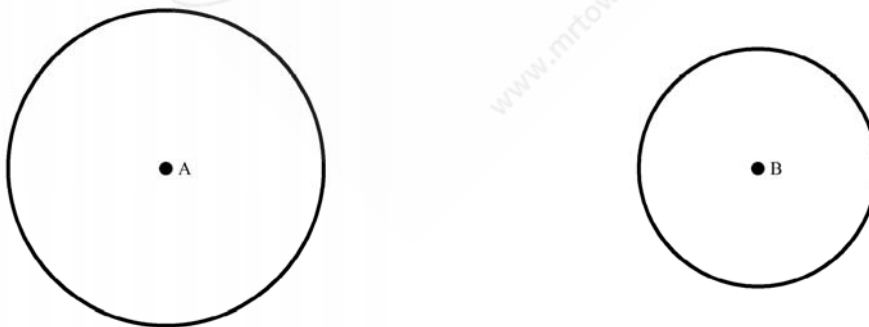
6. The scale factor of circle A to circle B is $\frac{7}{8}$. If the circumference of circle A is 43.96 yards, what is the circumference of circle B to the nearest yard? Use 3.14 as an approximation for pi.



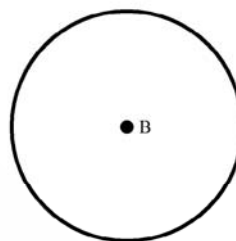
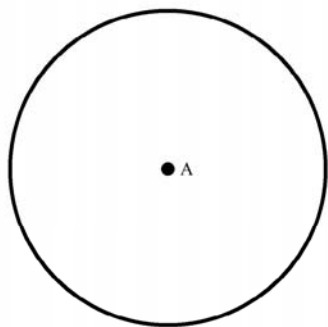
7. The scale factor of circle A to circle B is $\frac{4}{5}$. If the circumference of circle B is 125.6 inches, what is the radius of circle A to the nearest inch? Use 3.14 as an approximation for pi.



8. The scale factor of circle A to circle B is $\frac{21}{16}$. If the circumference of circle A is 131.88 yards, what is the diameter of circle B to the nearest yard? Use 3.14 as an approximation for pi.



9. The scale factor of circle A to circle B is $\frac{17}{12}$. If the area of circle A is 907.46 square yards, what is the diameter of circle B to the nearest yard? Use 3.14 as an approximation for pi.



Learning is fun!



www.mrtownsend.com

Similar Circles
Answer Section

1. ANS: 1190
2. ANS: 10
3. ANS: 24
4. ANS: 1661
5. ANS: 14
6. ANS: 50
7. ANS: 16
8. ANS: 32
9. ANS: 24

