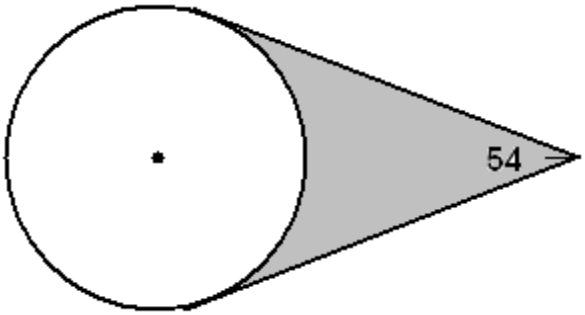
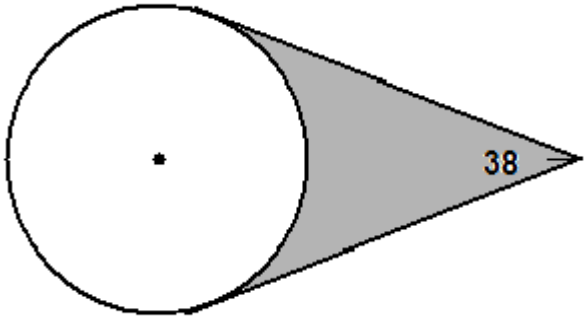
CP Geometry **Name:** _____

More Interesting Problems with Tangents

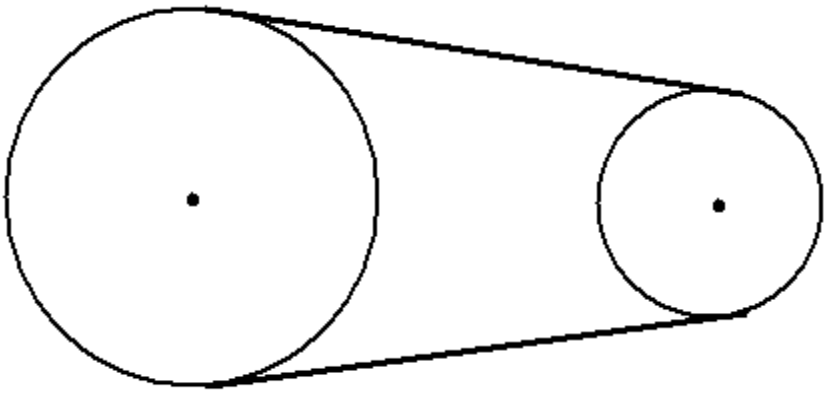
[EX 1] The circle has a radius of 18 cm. Two tangents are drawn to it from a point outside the circle. Find the area of the shaded region.



[EX 2] The circle has a radius of 40 cm. Two tangents are drawn to it from a point outside the circle. Find the area of the shaded region.



[EX 3] A belt connects two gears on a mechanical object. The distance between the centers of the gears is 50 inches. If the radius of the larger gear is 20 inches and the radius of the smaller gear is 14 inches, what is the length of the belt that would be wrapped around the gears?



[EX 4] A belt connects two gears on a mechanical object. The distance between the centers of the gears is 75 inches. If the radius of the larger gear is 32 inches and the radius of the smaller gear is 20 inches, what is the length of the belt that would be wrapped around the gears?