## Circles Worksheet 1

Use the relationships  $\frac{C}{C'} = \frac{d}{d'} = \frac{r}{r'}$  or  $\frac{A}{A'} = \frac{d^2}{d'^2} = \frac{r^2}{r'^2}$  to solve the following problems. Round decimal answers to the tenths place unless otherwise instructed.

1. Given 
$$\frac{C}{C'} = 0.25$$
 and  $r = 3.0$  cm, find  $r'$ . 6. Given  $\frac{A}{A'} = 0.50$  and  $d' = 3.0$  cm, find  $r$ .

6. Given 
$$\frac{A}{A'} = 0.50$$
 and  $d' = 3.0$  cm, find  $r$ 

2. Given 
$$\frac{C}{C'} = 0.5$$
 and  $r' = 4$  km, find  $r$ .

7. Given 
$$\frac{A'}{A} = 25$$
, find  $\frac{d'}{d}$ .

3. Given 
$$d=2.32$$
 in and  $d'=3.47$  in, find  $\frac{C}{C'}$ .

8. Given 
$$d = 2.0$$
 mm and  $d' = 3.0$  mm, find  $\frac{A}{A'}$ . Leave your answer in fractional form.

4. Given 
$$\frac{r}{r'} = 4.97$$
, find  $\frac{d}{d'}$ .

9. Given 
$$\frac{d^2}{d^{\prime 2}} = \sqrt{7}$$
, find  $\frac{r^{\prime 2}}{r^2}$ . Leave your answer in radical form.

5. Given 
$$\frac{d}{d'} = 0.75$$
 and  $C' = 7.77$  ft, find  $C$ .

10. Given 
$$\frac{A}{A'} = \frac{4}{5}$$
 and  $r^2 = 80$  mi, find  $d'$ .

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