

Name: _____

Date: _____

Circles: Basic Properties of Circles

Pi (π) is a number whose value is described by the relationship between the circumference and diameter of a circle: $\pi = C/d$. From this relationship, we can find both circumference and diameter:

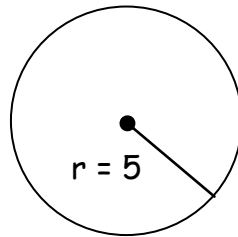
Circumference: $C = \pi d$, or $C = 2\pi r$

Diameter: $d = C/\pi$

To find the area of a circle, use the formula $A = \pi r^2$.

Example:

Area
 $A = \pi r^2$
 $A = \pi(5)^2$
 $= \pi(25)$
 $= 3.14(25)$
 $= 78.5$



Circumference
 $C = 2\pi r$
 $= 2\pi(5)$
 $= 10\pi$
 $= 10(3.14)$
 $= 31.4$

Practice. Find the circumference and area of the following figures.

1. $r = 1.4$

$C =$

$A =$

3. $r = 5.2$

$C =$

$A =$

5. $r = 2.8$

$C =$

$A =$

7. $r = 4.3$

$C =$

$A =$

9. $r = 3.7$

$C =$

$A =$

2. $r = 4$

$C =$

$A =$

4. $r = 3.6$

$C =$

$A =$

6. $r = 6.28$

$C =$

$A =$

8. $r = 8$

$C =$

$A =$

10. $r = 1.8$

$C =$

$A =$

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Answer Key

Circle: Basic Properties of Circles

1. 8.70; 6.15
2. 25.12; 50.24
3. 32.66; 84.91
4. 22.61; 40.69
5. 17.58; 24.62
6. 39.44; 123.84
7. 27; 58.06
8. 50.24; 200.96
9. 23.24; 42.99
10. 11.30; 10.17