HW Circles (Answers)

1) $C = \pi d$ $r = 4.5, d = 9$
$C = \pi(9)$
$C = 3.14(9)$
$C = 28.26$
$\boxed{C = 28.3\,m}$

2) $C = \pi d$ $r = 5, d = 10$
$C = \pi(10)$
$C = (3.14)(10)$
$\boxed{C = 31.4\,cm}$

3) $C = \pi d$ $r = 14, d = 28$
$C = \pi(28)$
$C = (3.14)(28)$
$C = 87.92$
$\boxed{C = 88.0\,in}$

4) $C = \pi d$ $d = 30.2$
$C = \pi(30.2)$
$C = (3.14)(30.2)$
$C = 94.82$
$\boxed{C = 94.8}$

5) $C = \pi d$ $d = 16.8$
$C = \pi(168)$
$C = (3.14)(16.8)$
$C = 52.752$
$\boxed{C = 52.8\,cm}$

6) $C = \pi d$ $d = 26$
$C = \pi(26)$
$C = (3.14)(26)$
$C = 81.64$
$\boxed{C = 81.6\,cm}$

7) $C = \pi d$ $r = 12, d = 24$
$C = \pi(24)$
$C = (3.14)(24)$
$C = 75.36$
$\boxed{C = 75.4\,yd}$

8) $C = \pi d$ $r = 5.5, d = 11$
$C = \pi(11)$
$C = (3.14)(11)$
$C = 34.54$
$\boxed{C = 34.5\,mi}$

9) $A = \pi r^2$ $r = 12$
$A = (3.14)(12)^2$
$A = (3.14)(144)$
$A = 452.16$
$\boxed{A = 452.2\,ft^2}$

10) $A = \pi r^2$ $r = 10$
$A = (3.14)(10)^2$
$A = (3.14)(100)$
$\boxed{A = 314\,cm^2}$

11) $A = \pi r^2$ $r = 8$

$A = (3.14)(8)^2$

$A = (3.14)(64)$

$A = 200.96$

$\boxed{A = 201.0\ m^2}$

12) $A = \pi r^2$ $d = 4$, $r = 2$

$A = (3.14)(2)^2$

$A = 3.14(4)$

$A = 12.56$

$\boxed{A = 12.6\ m^2}$

13) $A = \pi r^2$ $d = 20$ $r = 10$

$A = (3.14)(10)^2$

$A = 3.14(100)$

$\boxed{A = 314.0\ yd^2}$

14) $A = \pi r^2$ $d = 34$, $r = 17$

$A = 3.14(17)^2$

$A = 3.14(289)$

$A = 907.46$

$\boxed{A = 907.5\ ft^2}$

15) $A = \pi r^2$ $r = 8$

$A = 3.14(8)^2$

$A = 3.14(64)$

$A = 200.96$

$\boxed{A = 201.0\ ft^2}$

16) $A = \pi r^2$ $r = 5$

$A = 3.14(5)^2$

$A = 3.14(25)$

$\boxed{A = 78.5\ cm^2}$

17) $A = 4\pi$

$A = \pi r^2$

$4\pi = \pi r^2$

$4 = r^2$

$\sqrt{4} = \sqrt{r^2}$

$2 = r$

$\boxed{4\ in. = d}$

18) $A = 49\pi$

$A = \pi r^2$

$49\pi = \pi r^2$

$49 = r^2$

$\sqrt{49} = \sqrt{r^2}$

$7 = r$

$\boxed{14\ yd = d}$

19) $C = 162\pi$

$C = \pi d$

$162\pi = \pi d$

$\boxed{162\ yd = d}$

20) $C = 30\pi$

$C = \pi d$

$30\pi = \pi d$

$\boxed{30\ yd = d}$