Z2 str. 119/7

a) $r = 5\,cm$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq 3{,}14 \cdot 5^2$

$p \doteq 3{,}14 \cdot 25$

$p \doteq 78{,}5\ cm^2$

b) $r = 1{,}5\,dm$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq 3{,}14 \cdot 1{,}5^2$

$p \doteq 3{,}14 \cdot 2{,}25$

$p \doteq 7{,}065\ dm^2$

c) $r = \dfrac{1}{11}\,m$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \dfrac{22}{7} \cdot \left(\dfrac{1}{11}\right)^2$

$p \doteq \dfrac{22 \cdot 1 \cdot {}^{2}}{7 \cdot 121 \cdot 11}$

$p \doteq \dfrac{2}{77}\ m^2$

Z2 str. 119/8

$\pi = \dfrac{22}{7}$

a) $d = 7\,cm$

$p =$

$r = \dfrac{d}{2} = \dfrac{7}{2}\ cm$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \dfrac{22}{7} \cdot \left(\dfrac{7}{2}\right)^2$

$p \doteq \dfrac{22}{7} \cdot \dfrac{49}{4}$

$p \doteq \dfrac{22 \cdot 49 \cdot 7 \cdot 11}{7 \cdot 4 \cdot 1 \cdot 2} = \dfrac{77}{2} \cdot cm^2$

$p \doteq 38{,}5\ cm^2$

b)

$d = 1,4\,dm = 14\,cm$ $r = \dfrac{d}{2} = \dfrac{14}{2} = 7\,cm$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \dfrac{22}{7} \cdot 7^2$

$p \doteq \dfrac{22}{7} \cdot 49$

$p \doteq \dfrac{22 \cdot 49 \cdot 7}{7 \cdot 1 \cdot 1}$

$p \doteq 154\,cm^2$

$p \doteq 1,54\,dm^2$

c)

$d = 1\dfrac{3}{11}\,m$

$p =$

$r = d : 2 = 1\dfrac{3}{11} : 2 =$

$= \dfrac{14 \cdot 1 \cdot 7}{11 \cdot 2 \cdot 1} = \dfrac{7}{11}\,m$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \dfrac{22}{7} \cdot \left(\dfrac{7}{11}\right)^2$

$p \doteq \dfrac{22}{7} \cdot \dfrac{49}{121}$

$p \doteq \dfrac{22 \cdot 49 \cdot 2 \cdot 7}{7 \cdot 121 \cdot 11 \cdot 1}$

$p \doteq \dfrac{14}{11} = 1\dfrac{3}{11}\,m^2$

a) $p = 12,56 \, m^2$

$r =$

$p = \pi \cdot r^2$

$12,56 = 3,14 \cdot r^2$

$r^2 = 12,56 : 3,14$

$r^2 = 4$

$r = \sqrt{4}$

$r = 2 \, m$

ali

$r = \sqrt{\frac{p}{\pi}}$

$r = \sqrt{\frac{12,56}{3,14}}$

$r = \sqrt{4}$

$r = 2 \, m$

b) $p = 314 \, cm^2$

$r =$

$p = \pi \cdot r^2$

$314 = 3,14 \cdot r^2$

$r^2 = 314 : 3,14$

$r^2 = 100$

$r = \sqrt{100}$

$r = 10 \, cm$

ali

$r = \sqrt{\frac{p}{\pi}}$

$r = \sqrt{\frac{314}{3,14}}$

$r = \sqrt{100}$

$r = 10 \, cm$

c) $p = 153,86 \, m^2$

$r =$

$p = \pi \cdot r^2$

$153,86 = 3,14 \cdot r^2$

$r^2 = 153,86 : 3,14$

$r^2 = 49$

$r = \sqrt{49}$

$r = 7 \, m$

oli

$r = \sqrt{\frac{p}{\pi}}$

$r = \sqrt{\frac{153,86}{3,14}}$

$r = \sqrt{49}$

$r = 7 \, m$

Z2 str. 126/7

a) $r = 14\ cm$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \frac{22}{7} \cdot 14^2$

$p \doteq \frac{22}{7} \cdot 196$

$p \doteq \frac{22 \cdot 196 \cdot 28}{7 \cdot 1 \cdot 1} = 616\ cm^2$

b) $r = 3,5\ dm$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq 3,14 \cdot 3,5^2$

$p \doteq 3,14 \cdot 12,25$

$p \doteq 38,465\ dm^2$

$p \doteq 38,5\ dm^2$

c) $r = 1\frac{10}{11}\ m$

$p =$

$\boxed{p = \pi \cdot r^2}$

$p \doteq \frac{22}{7} \cdot \left(1\frac{10}{11}\right)^2$

$p \doteq \frac{22}{7} \cdot \left(\frac{21}{11}\right)^2$

$p \doteq \frac{22 \cdot 441 \cdot 2 \cdot 63}{7 \cdot 121 \cdot 11 \cdot 1}$

$p \doteq \frac{126}{11} = 11\frac{5}{11} \doteq 11,45\ m^2$

72 str. 126/8

a) $\underline{d = 42 \text{ cm}}$
$P =$

$r = \dfrac{d}{2} = \dfrac{42}{2} = 21 \text{ cm}$

$\boxed{P = \pi \cdot r^2}$

$P \doteq \dfrac{22}{7} \cdot 21^2$

$P \doteq \dfrac{22}{7} \cdot 441$

$P \doteq \dfrac{22 \cdot 441 \cdot 63}{7 \cdot 1 \cdot 1} \doteq 1386 \text{ cm}^2$

b) $\underline{d = 1,4 \text{ m} = 14 \text{ dm}}$
$P =$

$r = \dfrac{d}{2} = \dfrac{14}{2} = 7 \text{ dm}$

$\boxed{P \doteq \pi \cdot r^2}$

$P \doteq \dfrac{22}{7} \cdot 7^2$

$P \doteq \dfrac{22}{7} \cdot 49$

$P \doteq \dfrac{22 \cdot 49 \cdot 7}{7 \cdot 1 \cdot 1} = 154 \text{ dm}^2$

$P \doteq 1,54 \text{ m}^2$

c) $\underline{d = 2\frac{6}{11} \text{ m}}$
$P =$

$r = d : 2 = 2\frac{6}{11} : 2 =$
$= \dfrac{28 \cdot 1 \cdot 14}{11 \cdot 2 \cdot 1} = \dfrac{14}{11} \text{ m}$

$\boxed{P = \pi \cdot r^2}$

$P \doteq \dfrac{22}{7} \cdot \left(\dfrac{14}{11}\right)^2$

$P \doteq \dfrac{22}{7} \cdot \dfrac{196}{121}$

$P \doteq \dfrac{22 \cdot 196 \cdot 2 \cdot 28}{7 \cdot 121 \cdot 11 \cdot 1} = \dfrac{56}{11}$

$P \doteq 5\frac{1}{11} \doteq 5,09 \text{ m}^2$

Z 2 st. 126/9

a) $p = 28,26 \text{ cm}^2$

$r =$

$p = \pi \cdot r^2$

$28,26 = 3,14 \cdot r^2$

$r^2 = 28,26 : 3,14$

$r^2 = 9$

$r = \sqrt{9}$

$r = 3 \text{ cm}$

ali

$r = \sqrt{\dfrac{p}{\pi}}$

$r = \sqrt{\dfrac{28,26}{3,14}}$

$r = \sqrt{9}$

$r = 3 \text{ cm}$

b) $p = 314 \text{ mm}^2$

$r =$

$p = \pi \cdot r^2$

$314 = 3,14 \cdot r^2$

$r^2 = 314 : 3,14$

$r^2 = 100$

$r = \sqrt{100}$

$r = 10 \text{ mm}$

ali

$r = \sqrt{\dfrac{p}{\pi}}$

$r = \sqrt{\dfrac{314}{3,14}}$

$r = \sqrt{100}$

$r = 10 \text{ mm}$

c) $p = 729 \pi \text{ dm}^2$

$r =$

$p = \pi \cdot r^2$

$729\pi = \pi \cdot r^2$

$r^2 = 729$

$r = \sqrt{729}$

$r = 27 \text{ dm}$

ali

$r = \sqrt{\dfrac{p}{\pi}}$

$r = \sqrt{\dfrac{729\pi}{\pi}}$

$r = \sqrt{729}$

$r = 27 \text{ dm}$