Gabarito das atividades de áreas das figuras planas.

1) a) $A = b \cdot h$

$A = 6 \cdot 3$

$A = 18 cm^2$

b) $A = b \cdot h$

$A = 3{,}4 \cdot 5{,}3$

$A = 18{,}02\ dm^2$

c) $A = \ell^2$

$A = (5{,}2)^2$

$A = 27{,}04\ cm^2$

d) $A = \frac{\ell^2 \sqrt{3}}{4}$

$A = \frac{6^2 \sqrt{3}}{4}$

$A = 9\sqrt{3}\ cm^2$

e) $A = \frac{b \cdot h}{2}$

$A = \frac{4 \cdot 3}{2}$

$A = 6 cm^2$

f) $d = \ell\sqrt{2}$

$4 = \ell\sqrt{2}$

$\frac{4}{\sqrt{2}} = \ell$

$\ell = \frac{4}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} \rightarrow 2\sqrt{2}\ cm$

$A = \ell^2$

$A = (2\sqrt{2})^2$

$A = 4 \cdot 2$

$A = 8 cm^2$

g) $A = 6 \cdot \frac{\ell^2 \sqrt{3}}{4}$

$A = 6 \cdot \frac{3^2 \sqrt{3}}{4}$

$A = \frac{27\sqrt{3}}{2}\ cm^2$

h) $A = b \cdot h$

$A = 8 \cdot 3$

$A = 24 cm^2$

i) $A = \frac{(B+b)h}{2}$

$A = \frac{(6+2)4}{2}$

$A = 16 cm^2$

j) $A = \frac{(B+b)h}{2}$

$A = \frac{(5+2)3}{2}$

$A = 10{,}5 cm^2$

l) $A = \frac{D \times d}{2}$

$A = \frac{7 \cdot 5}{2}$

$A = 17{,}5 cm^2$

m) $A = \pi \cdot r^2$

$A = \pi \cdot 3^2$

$A = 9\pi cm^2$ ou $9 \cdot 3{,}14 \rightarrow 28{,}26 cm^2$

n) $A = \pi \cdot r^2$

$A = \pi \cdot (1{,}5)^2$

$A = 2{,}25\pi cm^2$

pode substituir o π ou não.

o) $A = A_{\triangle} + A_{\square} + A_{\square} + A_{\square}$

$A = \frac{b \cdot h}{2} + b \cdot h + b \cdot h + \ell^2$

$A = \frac{4 \cdot 3}{2} + 3 \cdot 3 + 4 \cdot 3 + 3^2$

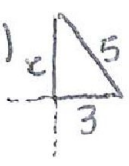
A.TOTAL $= 36 cm^2$

p) $D = 14 dm$

$d = 8 dm$

$A = \frac{D \cdot d}{2}$

$A = \frac{14 \cdot 8}{2} \rightarrow 56\ dm^2$

q) 

$5^2 = 3^2 + x^2$

$25 - 9 = x^2$

$x = \sqrt{16}$

$x = 4$

$D = 8 cm$

$d = 6 cm$

$A = \frac{D \cdot d}{2}$

$A = \frac{8 \cdot 6}{2}$

$A = 24 cm^2$

2) a) $A = A_{\square} - A_o$

$A = \ell^2 - \pi \cdot r^2$

$A = 4^2 - 3{,}14 \cdot 2^2$

$A = 16 - 12{,}50$

$A = 3{,}44\,cm^2$

b) $A = 2 \cdot A_{\triangle}$

$A = 2 \cdot \frac{b \cdot h}{2}$

$A = 2 \cdot \frac{8 \cdot 5}{2}$

$A = 10\,cm^2$

c) $A = A_{\trapezoid}$

$A = \frac{(B+b)h}{2}$

$A = \frac{(7+3)5}{2}$

$A = 25\,cm^2$

d) $A = \frac{A_o}{2}$

$A = \frac{\pi \cdot r^2}{2}$

$A = \frac{\pi \cdot 3^2}{2}$

$A = 4{,}5\pi\,cm^2$

e) $A = A_{\square} - \frac{A_o}{2}$

$A = b \cdot h - \frac{\pi \cdot r^2}{2}$

$A = 6 \cdot 3 - \frac{3{,}14 \cdot 3^2}{2}$

$A = 3{,}87\,cm^2$

f) $A = A_O - A_o$

$A = \pi \cdot 5^2 - \pi \cdot 3^2$

$A = 16\pi\,cm^2$

g) $A = \frac{A_o}{4}$

$A = \frac{\pi \cdot r^2}{4} \rightarrow \frac{\pi \cdot 10^2}{4} \rightarrow 25\pi\,cm^2$

h) $A = A_{\rectangle} - A_o$

$A = b \cdot h - \pi \cdot r^2$

$A = 8 \cdot 4 - 3{,}14 \cdot 2^2$

$A = 19{,}44\,cm^2$

i) $A = A_o$

$A = \pi \cdot r^2$

$A = \pi \cdot 2^2$

$A = 4\pi\,cm^2$

j) $A = \frac{A_o}{2}$

$A = \frac{\pi \cdot r^2}{2}$

$A = \frac{\pi \cdot (1{,}5)^2}{2}$

$A = 1{,}125\pi\,cm^2$

l) $A = \frac{A_o}{2}$

$A = \frac{\pi \cdot r^2}{2}$

$A = \frac{\pi \cdot 2^2}{2}$

$A = 2\pi\,cm^2$

m) $A = A_{\square} - \frac{A_o}{2}$

$A = 4^2 - \frac{3{,}14 \cdot 2^2}{2}$

$A = 9{,}72\,cm^2$

Obs: retificar a resposta da letra n

n) $D = 18\,cm$

$d = 12\,cm$

$A = \left(\frac{D \cdot d}{2}\right) \cdot \frac{1}{4}$

$A = \left(\frac{18 \cdot 12}{2}\right) \cdot \frac{1}{4}$

$A = 27\,cm^2$

ou $A_{\triangle} = \frac{b \cdot h}{2}$

$A = \frac{6 \cdot 9}{2}$

$A = 27\,cm^2$

o) $d = \ell\sqrt{2}$

$8 = \ell\sqrt{2}$

$\frac{8}{\sqrt{2}} = \ell$

$\ell = \frac{8}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}}$

$\ell = \frac{8\sqrt{2}}{2}$

$\ell = 4\sqrt{2}\,cm$

$A = \frac{A_{\square}}{2}$

$A = \frac{\ell^2}{2}$

$A = \frac{(4\sqrt{2})^2}{2}$

$A = 16\,cm^2$

p) $A = 2 \cdot A_{\triangle}$

$A = 2 \cdot \frac{\ell^2\sqrt{3}}{4}$

$A = 2 \cdot \frac{2^2\sqrt{3}}{4}$

$A = 2\sqrt{3}\,cm^2$

q) $A = \frac{A_O}{4}$

$A = \frac{\pi \cdot r^2}{4}$

$A = \frac{\pi \cdot 3^2}{4}$

$A = 2{,}25\,\pi\,cm^2$