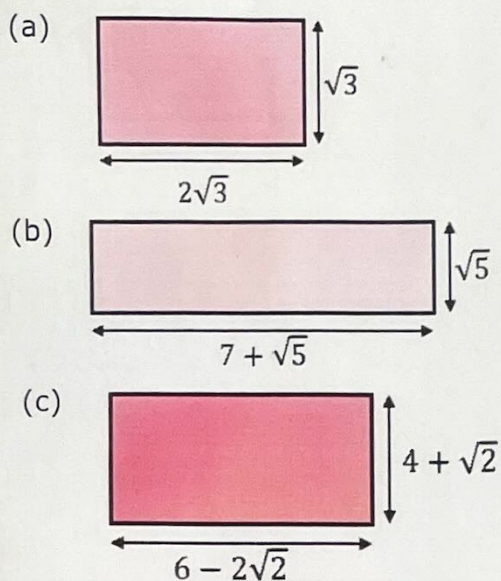


Surds with Perimeter, Area, Volume

Find the area and perimeter of these rectangles.

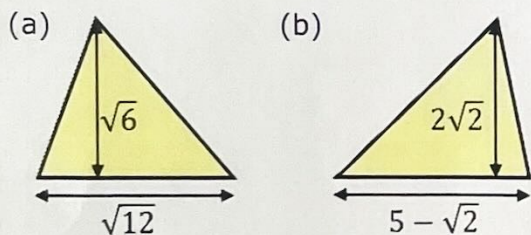


(a) Area = 6
Perimeter = $6\sqrt{3}$

(b) Area = $7\sqrt{5} + 5$
Perimeter = $14 + 4\sqrt{5}$

(c) Area = $20 - 2\sqrt{2}$
Perimeter = $20 - 2\sqrt{2}$

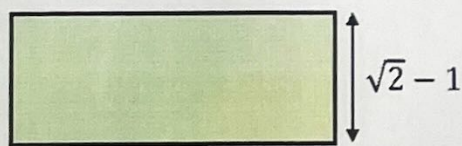
Find the area of these triangles.



(a) $3\sqrt{2}$

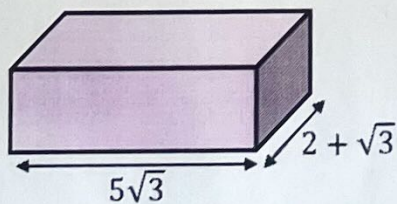
(b) $5\sqrt{2} - 2$

The perimeter of this rectangle is $8\sqrt{2}$. Find the area of the rectangle.



(a) Length = $3\sqrt{2} + 1$
Area = $5 - 2\sqrt{2}$

(a) The volume of the cuboid shown is $15 + 5\sqrt{3}$. Find the height of the cuboid.



(a) Height = $\sqrt{2} - 1$

(b) Radius = $2\sqrt{5}$

(b) The volume of a cylinder is $40\pi + 20\pi\sqrt{2}$. If the height of the cylinder is $2 + \sqrt{2}$, find the exact radius of the cylinder.