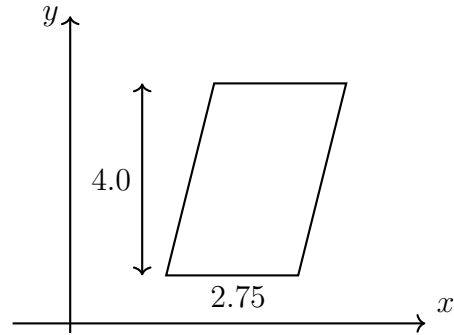


Name:

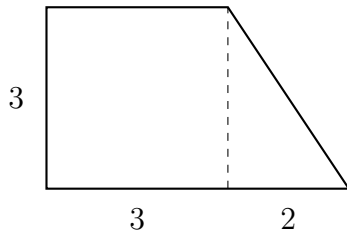
### 1.10 Homework: Area situations

1. A parallelogram is shown on the  $x$ - $y$  plane having a base  $b = 2.75$  and height  $h = 4.0$ .

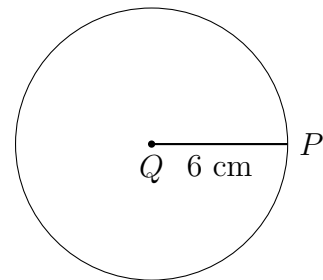
Find its area, showing the calculation.



2. The compound shape shown below is composed of a square with side length 5 cm and a triangle with base 2 cm. Find the total area of the combined shape.

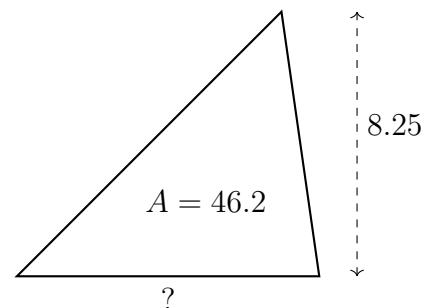


3. Find the area of circle  $Q$  with radius  $r = 6$  centimeters, rounded to the *nearest tenth*.



4. Find the length of the base of a triangle with area  $A = 46.2$  and height  $h = 8.25$ . Express your result as a decimal. Start with the form (use  $b$  or  $x$ ):

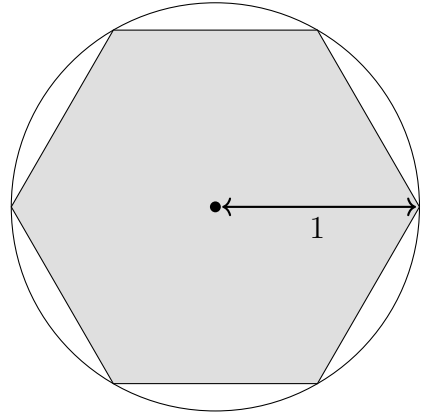
$$A = \frac{1}{2} \times b \times h = 46.2$$



5. Archimedes used polygons to approximate  $\pi$ . He calculated the area of the inscribed hexagon below as  $A_{\text{hexagon}} \approx 2.5981$ .

(a) Find the area of the circle with  $r = 1$ .

(b) Find the percent error of Archimede's approximation using a hexagon.



6. Find the area of the compound shape shown below composed of a rectangle measuring 2 by 6 and two circles, each with radius  $r = 2$ .

