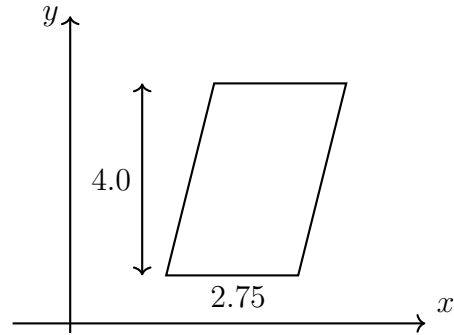


Name:

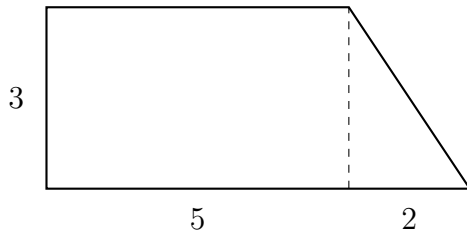
1.10 Homework: Area situations

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

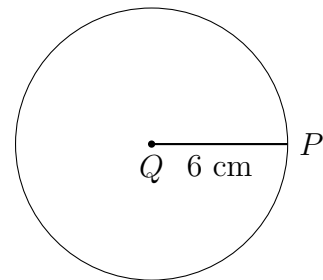
Find its area, showing the calculation.



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.

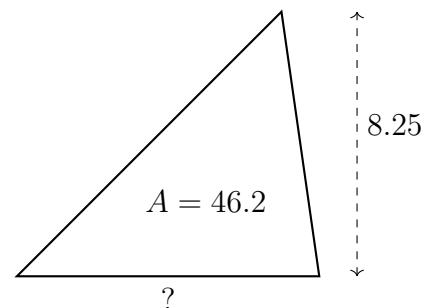


3. Find the area of circle Q with radius $r = 6$ centimeters, rounded to the *nearest tenth*.



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):

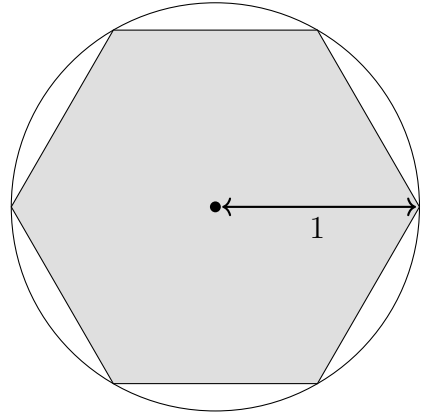
$$A = \frac{1}{2} \times b \times h = 46.2$$



5. Archimedes used polygons to approximate π . 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 $r = 2$.

