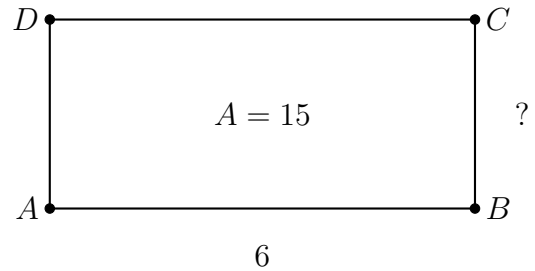


Name:

1.9 Rounding and circle area

1. Rectangle $ABCD$ has area $A = 15$ and base $b = 6$ but unknown height. Write an equation then solve. Start with this form (for the unknown, use h , x , or BC) and state your answer as a fraction:

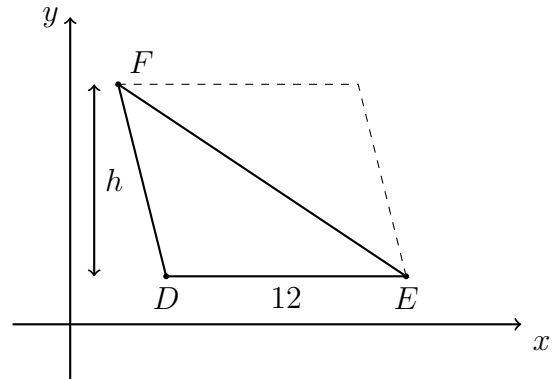
$$A = b \times h = 15$$



2. The $\triangle DEF$ has an area $A = 54$ and base $DE = 12$.

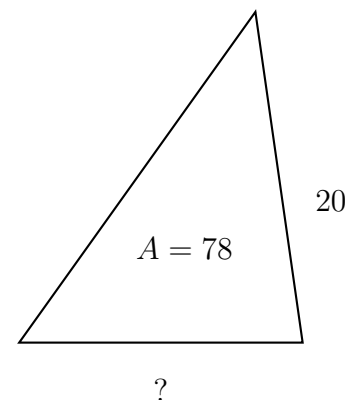
Find its height, starting with an equation.

$$A = \frac{1}{2}bh = 54$$



3. Find the length of the base of a triangle with area $A = 78$ and height $h = 20$. Express your result as a decimal. Start with the form (use b or x):

$$A = \frac{1}{2} \times b \times h = 78$$



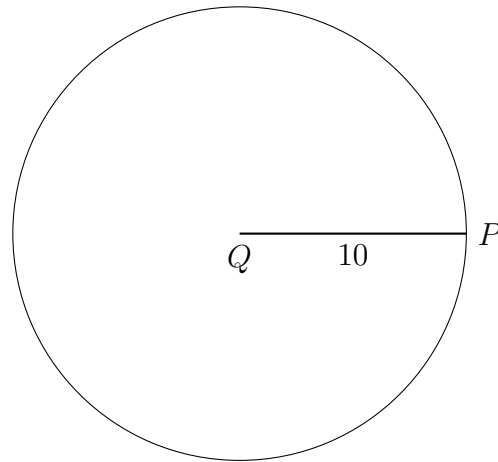
4. Find the area of the given circle Q with radius $r = 10$ centimeters.

Start with the formula

$$A = \pi r^2$$

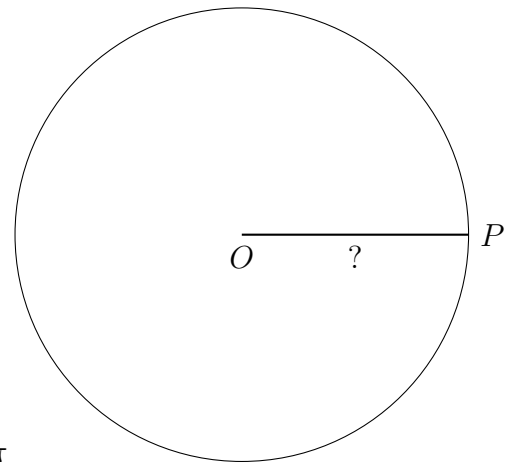
(a) State the area in terms of π

(b) Now round to the nearest hundredth



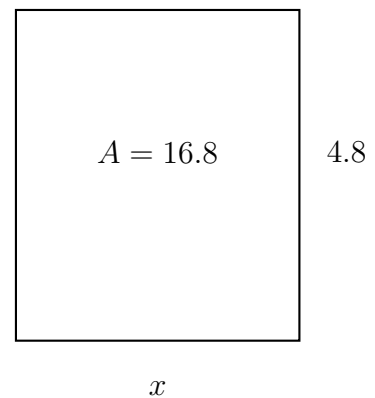
5. Given circle O with area $A = 49\pi$ square centimeters.

Find the radius of circle, OP . Start with the formula



$$A = \pi r^2 = 49\pi$$

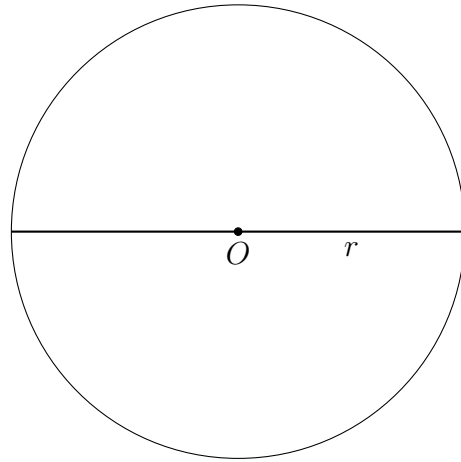
6. Find the base of a rectangle with area $A = 16.8$ and height $h = 4.8$, expressed as a decimal. First write an equation substituting the given values in the area formula.



7. Find the radius and circumference of circle O with diameter $D = 14$ centimeters.

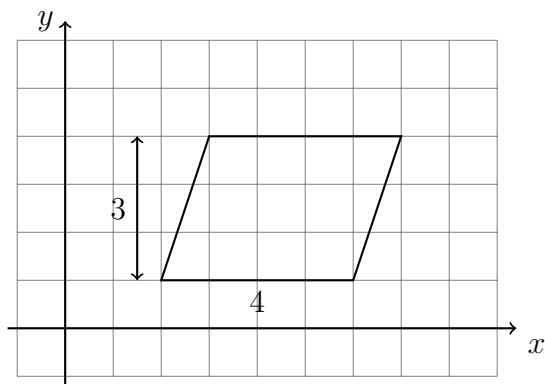
Name:

- (a) Write down the radius.
- (b) State the circumference in terms of π
- (c) Express the circumference as a decimal, rounding to the nearest tenth.



8. A parallelogram is shown on the x - y plane having a base $b = 4$ and height $h = 3$.

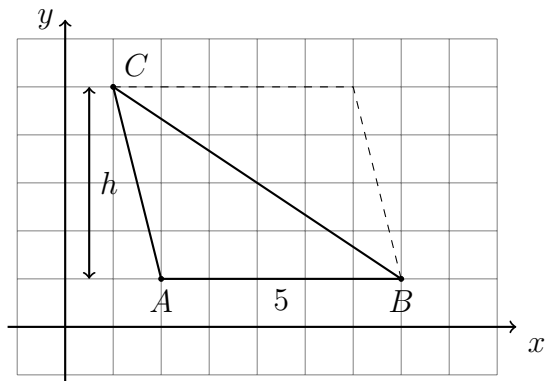
Find its area, showing the calculation.



9. The $\triangle ABC$ is shown below with $A(2, 1)$, $B(7, 1)$, and $C(1, 5)$. The length of the base of the triangle is $AB = 5$.

(a) Find the height h .

(b) Find its area, showing the calculation.



10. Spicy: Find the area of the $\triangle ABC$ is shown below with $A(3, 2)$, $B(7, 4)$, and $C(4, 8)$.

(a) First find the area of the red rectangle with sides $b = 4$, $h = 6$.

(b) Find the area of the three triangles surrounding $\triangle ABC$ in the rectangle.

(c) Subtract their areas from the rectangle to find $A_{\triangle ABC}$

