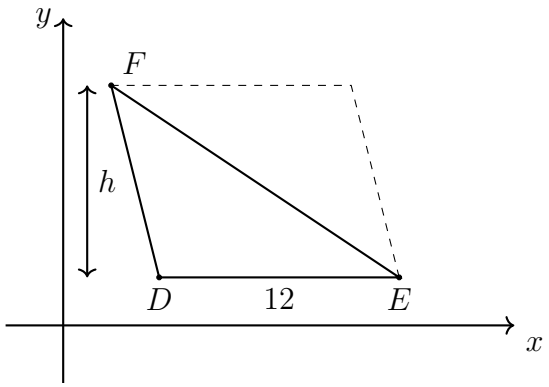
1.9 Homework: Solving for missing parameters

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

   Find its height, starting with an equation.

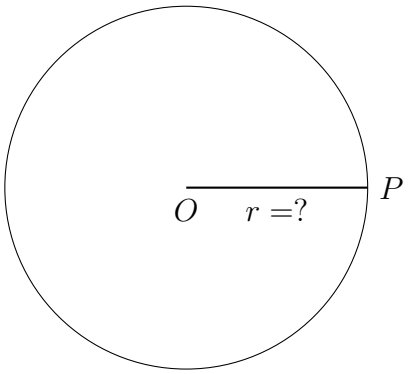
   $A = \frac{1}{2}bh = 54$



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

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

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



3. Mark each statement true of false.

   (a) T F 3.14 is the exact value of π

   (b) T F 4π is the area of a circle with radius 2 in terms of π

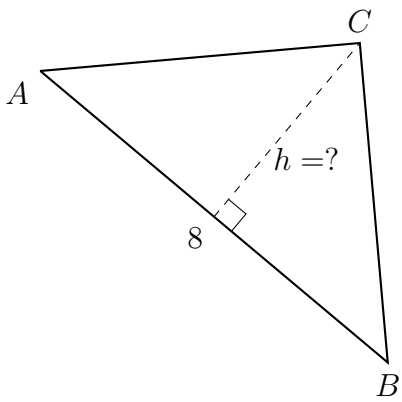
   (c) T F $C = 10\pi \approx 31.4$ is an approximation

   (d) T F $3\sqrt{2}$ is an exact value

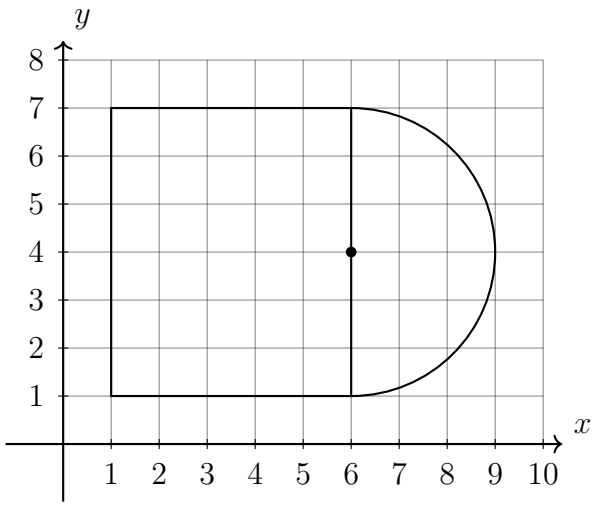
   (e) T F 0.707 is an approximation to the *nearest thousandth* for $\frac{1}{\sqrt{2}}$

   (f) T F Rounding 10.498 to the nearest whole number should round up because since 9 is more than 5, first you round to 10.5, then that rounds up to 11.

4. One side of the $\triangle ABC$, the base, has a length $AB = 8$ centimeters. The triangle's area is 44 square centimeters. Find the height of the triangle, shown as a dashed line in the diagram.



5. Find the area of the shape shown below composed of a rectangle and a semi-circle.



6. The given isosceles $\triangle TUV$ has a base of $TU = 50$ meters and a total perimeter of 200 meters. Find TV.