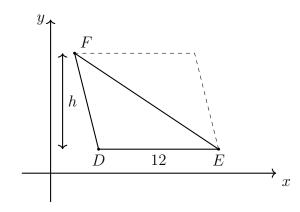
Name:

## 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.

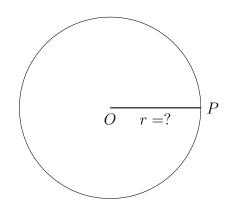
$$A = \frac{1}{2}bh = 54$$



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

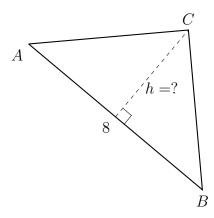
Find the radius of circle, OP. Start with the formula

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

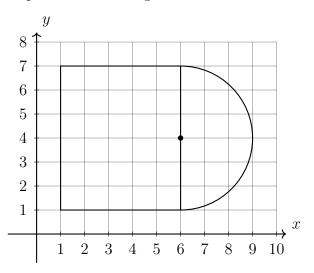


- 3. Mark each statement true of false.
  - (a) T F 3.14 is the exact value of  $\pi$
  - (b) T F  $4\pi$  is the area of a circle with radius 2 in terms of  $\pi$
  - (c) T F  $C = 10\pi \approx 31.4$  is an approximation
  - (d) T F  $3\sqrt{2}$  is an exact value
  - (e) T F 0.707 is an approximation 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.

