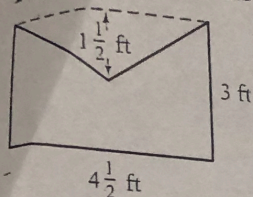
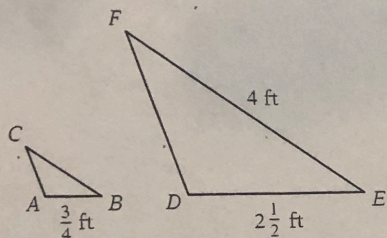


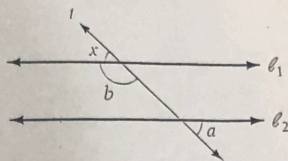
11. Find the area of the composite figure.



13. Triangles ABC and DEF are similar. Find side BC .

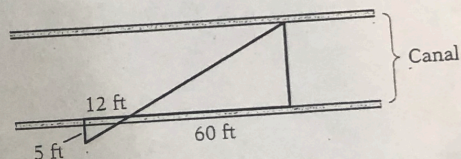


12. In the figure below, lines ℓ_1 and ℓ_2 are parallel. Angle x measures 45° . Find the measures of angles a and b .



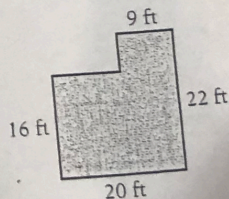
14. A right triangle has a 40° angle. Find the measures of the other two angles.

15. **Measurement** Use similar triangles to find the width of the canal shown in the figure at the right.



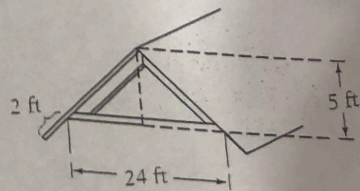
16. **Consumerism** How much more pizza is contained in a pizza with radius 10 in. than in one with radius 8 in.? Use 3.14 for π .

17. **Interior Design** A carpet is to be placed as shown in the diagram at the right. At \$26.80 per square yard, how much will it cost to carpet the area? Round to the nearest cent. ($9 \text{ ft}^2 = 1 \text{ yd}^2$)



18. **Forestry** Find the cross-sectional area of a redwood tree that is 11 ft 6 in. in diameter. Use 3.14 for π . Round to the nearest hundredth.

19. **Construction** Find the length of the rafter needed for the roof shown in the figure.



20. **Measurement** A toolbox is 1 ft 2 in. long, 9 in. wide, and 8 in. high. The sides and bottom of the toolbox are $\frac{1}{2}$ in. thick. Find the volume of the interior of the toolbox in cubic inches.