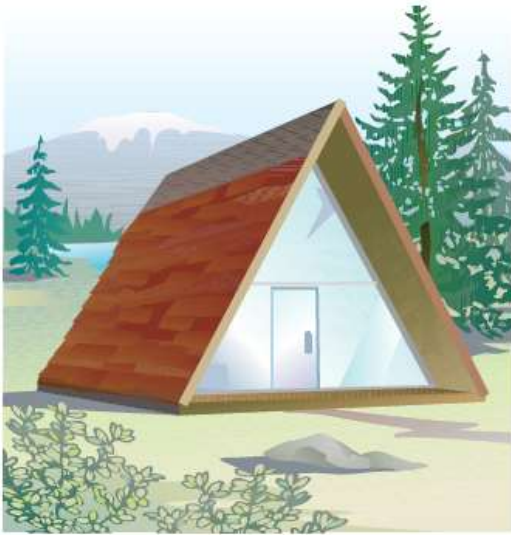


1. Amir's sister is away at college, and he wants to mail her a 34 in. baseball bat. The packing service sells only one kind of box, which measures 24 in. by 20 in. by 12 in. Will the box be big enough?
2. Meteorologist Paul Windward and geologist Rhaina Stone are rushing to a paleontology conference in Pecos Gulch. Paul lifts off in his balloon at noon from Lost Wages, heading east for Pecos Gulch Conference Center. With the wind blowing west to east, he averages a land speed of 30 km/h. This will allow him to arrive in 4 hours, just as the conference begins. Meanwhile, Rhaina is 160 km north of Lost Wages. At the moment of Paul's liftoff, Rhaina hops into an off-road vehicle and heads directly for the conference center. At what average speed must she travel to arrive at the same time Paul does?



3. A 25-foot ladder is placed against a building. The bottom of the ladder is 7 feet from the building. If the top of the ladder slips down 4 feet, how many feet will the bottom slide out? (It is not 4 feet.)

4. The front and back walls of an A-frame cabin are isosceles triangles, each with a base measuring 10 m and legs measuring 13 m. The entire front wall is made of glass 1 cm thick that costs \$120/m². What did the glass for the front wall cost?



5. Find the perimeter of an equilateral triangle whose median measures 6 cm.