3.1 SURFACE AREA OF PRISMS

Short Answer: Show all your work and draw a diagram where needed.

1. Gina is planning to reupholster her couch cushions. The cushions are rectangular, 5 inches high, 32 inches long, and 33 inches wide. Draw and label a diagram of the cushion. How much fabric will she need for each cushion? If fabric costs $13.89 per square inch, how much will each cushion cost?

Surface Area: ____________________  Cost: ____________________

2. Draw and label a net of a rectangular box with no lid, which is 0.9 ft feet high, 2.8 ft feet long, and 1.9 ft feet wide.
3. What is the surface area of this triangular prism? Draw and label a net diagram.

Answer: ______________________

4. A crate with no lid is shaped like a cube with sides that are 0.9 m long. Draw a net of the crate. What is the surface area of the crate?

Answer: ______________________
Problem

1. A crate is 4 feet long, 2 feet wide, and 1.5 feet high. Show all your work below.

   a) Draw and label a diagram of the crate. Answer:____________________

   b) What is the surface area of this crate? Answer:____________________

   c) What would be the surface area if the height of the crate was doubled?

      Answer:____________________
2. A swimming pool is 5.5 feet deep, 17 feet wide, and 20 feet long. The whole pool is same depth.

a) What is the surface area of the pool?

b) If the pool is being repainted and each can of sealing paint covers 130 square feet, how many cans of paint will be needed?