Algebra: Surface Area

How to Find Surface Area

• Surface area is the sum of all the faces of a solid figure.

Ask yourself:
• Did I include the areas of all the faces?
• Could I have used a formula?

Find the surface area of each solid figure.

1. \[ h = 2.6 \text{ ft} \]
   \[ 3 \text{ ft} \]
   \[ 3 \text{ ft} \]
   \[ 9 \text{ ft} \]
   \[ 3 \text{ ft} \]

2. \[ 1.5 \text{ yd} \]
   \[ 3 \text{ yd} \]
   \[ 4.5 \text{ yd} \]

3. \[ h = 10 \text{ m} \]
   \[ 8 \text{ m} \]
   \[ 8 \text{ m} \]

4. \[ 7.5 \text{ ft} \]
   \[ 5 \text{ ft} \]
   \[ 5 \text{ ft} \]

5. \[ 8 \text{ cm} \]
   \[ 9.3 \text{ cm} \]
   \[ 9.3 \text{ cm} \]
   \[ 64 + 22.6 = 86.6 \]
   \[ \sqrt{86.6} \approx 9.3 \]

6. \[ 6 \text{ in.} \]
   \[ 6 \text{ in.} \]
   \[ 6 \text{ in.} \]

Problem Solving

7. The surface area of a square pyramid is 112 ft². If the length of each edge of the base is 8 ft, what is the height of each triangular face?

Show Your Work

Use with text pages 564–565.