

1. Write each radical in simplest form.

a) $\sqrt{18}$

b) $\sqrt{96}$

c) $\sqrt{108}$

d) $\sqrt{48}$

e) $\sqrt[3]{135}$

f) $\sqrt[3]{162}$

g) $\sqrt[4]{48}$

h) $\sqrt[4]{176}$

i) $\sqrt{735}$

2. Write each mixed radical as an entire radical.

a) $5\sqrt{11}$

b) $2\sqrt{15}$

c) $4\sqrt[3]{2}$

d) $7\sqrt[4]{2}$

e) $4\sqrt[5]{3}$

f) $5\sqrt{6}$

3. Write the LCM for 18, 20 and 42.

4. Write the GCF for 150, 275, and 420.

5. The volume of a cube is 6859 in^3 . Determine the surface area of the cube.

6. A cube has a surface area of 1176 in^2 . What is its volume?