Mid-Chapter Review

You will need
- a ruler (imperial)

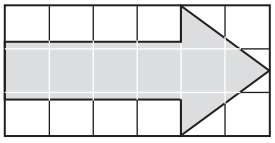
1. a) Name a referent for 1 cm^2. e.g., area of your fingernail

b) Estimate the area of your calculator. e.g., about 20 cm^2

c) Measure the length and width of your calculator, in inches. Calculate the area to the nearest square inch.

e.g., 2.5 in. x 4.75 in. = 11.875 sq in.

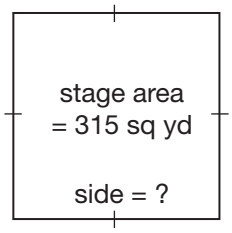
The area is about 12 sq in.



2. a) Name a referent for 1 sq ft. e.g., area of a floor tile

b) Estimate the area of this arrow painted on a wall.

(1 square represents 1 sq ft.) e.g., about 8 sq ft



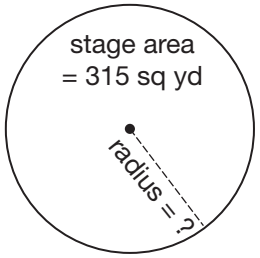
3. Two theatre stages each have an area of about 315 sq yd.

a) About how long is a side of the square stage?

e.g., Area of a square = s^2

315 sq yd = s^2, so $s = \sqrt{315}$, or about 17.7

The length of a side is about 17.7 yd.



b) About how long is the radius of the circular stage?

e.g., Area of a circle = $\pi \times r^2$

315 sq yd $\doteq$ 3.14 x r^2, so $r^2 = 315 \div 3.14$, or 100

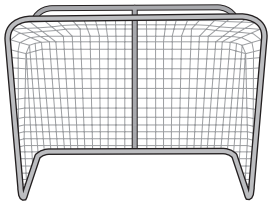
$r = \sqrt{100}$, or 10 The radius is about 10 yd.

4. In 2006, the area of Kelowna was 211.69 km^2, and Chilliwack was 260.19 km^2. How much larger was Chilliwack? Express your answer in square miles, to the nearest tenth.

e.g., 260.19 − 211.69 = 48.5 Chilliwack was 48.5 km^2 larger.

1 km^2 $\doteq$ 0.3861 sq mi, so

48.5 km^2 x 0.3861 sq mi/km^2 $\doteq$ 18.7 sq mi



5. Express the area of each opening, in square feet.

a) a lacrosse net, 6 ft by 6 ft 36 sq ft

b) a hockey net, 72 in. by 48 in. 24 sq ft

c) a soccer net, 8 yd by 8 ft 192 sq ft