

CHECK YOUR UNDERSTANDING

1. A Canadian football field is approximately 59 m wide.

What is this measurement to the nearest foot?

$$59 \text{ m} \times \frac{1.0936 \text{ yd}}{1 \text{ m}} \times \frac{3 \text{ ft}}{1 \text{ yd}} = 193.6 \text{ ft}$$



1.3 Relating SI and Imperial Units

CYU Question 1

CHECK YOUR UNDERSTANDING

2. After meeting in Osoyoos, B. C. Takoda drove 114 km north and Winona drove 68 mi. south. Who drove farther?

$$114 \text{ km} \times \frac{1 \text{ mi}}{1.6093 \text{ km}} = 70.8 \text{ mi}$$

Takoda drove farther.



1.3 Relating SI and Imperial Units

CYU Question 2

CHECK YOUR UNDERSTANDING

3. Nora knows that she is 5 ft. 7 in. tall.
- What height in centimetres will she list on her driver's license application?
  - Use mental math and estimation to justify that the answer is reasonable.

$$5'7'' = \underline{67} \text{ in} \qquad 5 \times 12 = 60$$

$$67 \text{ in} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = 170.2 \text{ cm}$$

170 cm tall

1.3 Relating SI and Imperial Units

CYU Question 3

CHECK YOUR UNDERSTANDING

4. A truck driver knows that his load is 15 ft. wide. Regulations along his route state that any load over 4.3 m wide must have wide-load markers and an escort with flashing lights. Does this vehicle need wide-load markers? Justify your answer.

Method 1

$$15 \text{ ft} \times \frac{1 \text{ yd}}{3 \text{ ft}} \times \frac{1 \text{ m}}{1.0936 \text{ yd}} = 4.6 \text{ m}$$

Load needs markers + an escort vehicle

Method 2

$$4.3 \text{ m} \times \frac{1.0936 \text{ yd}}{1 \text{ m}} \times \frac{3 \text{ ft}}{1 \text{ yd}} = 14.1 \text{ ft}$$

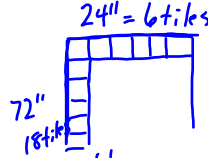
Same conclusion

1.3 Relating SI and Imperial Units

CYU Question 4

# HOMWORK...

Page 159: #1 - 7

4.  $2' \times 6' = 24'' \times 72''$  

$6 \times 18 = 108 \text{ tiles}$

$108 \text{ tiles} \times \frac{\$3.50}{\text{tile}} = \$378$

$\$378 + \$350 = \underline{\hspace{2cm}}$

# 5.  $A = l \times w$  **Company B**  $20 \text{ m} \times \frac{1.0936 \text{ yd}}{1 \text{ m}} = 21.9 \text{ yd}$  **Company A**

$A = 20 \text{ m} \times 40 \text{ m}$   
 $= 800 \text{ m}^2$

$A = 40 \text{ m} \times \frac{1.0936 \text{ yd}}{1 \text{ m}} = 43.7$

$\text{Cost} = 800 \text{ m}^2 \times \$2.50/\text{m}^2 + \$2000$   
 $= \$4000$

$A = 21.9 \text{ yd} \times 43.7$   
 $= 957.03 \text{ yd}^2$

$\text{Cost} = 957.03 \text{ yd}^2 \times \$4/\text{yd}^2$   
 $= \$3828.12$

**Company A is cheaper**

End of lesson