

MORE EXAMPLES...

1) $22 \text{ m}^2 = \overset{2.3}{\text{b.8}} \text{ ft}^2$
 $22 \text{ m}^2 \times \left(\frac{3.2808 \text{ ft}}{1 \text{ m}} \right)^2$

2) $1.75 \text{ mi}^2 = \text{_____ km}^2$

372 in^2

3) $2400 \text{ cm}^2 = \text{_____ in}^2$
 $2400 \text{ cm}^2 \times \left(\frac{0.3937 \text{ in}}{1 \text{ cm}} \right)^2$

4) $750 \text{ yd}^2 = \text{_____ m}^2$

5) $315 \text{ yd}^3 = \text{_____ m}^3$

6) $15 \text{ m}^3 = \overset{529.7}{\text{ft}^3}$
 ~~$15 \text{ m}^3 \times \left(\frac{1 \text{ ft}}{0.3048 \text{ m}} \right)^3$~~

7) $0.5 \text{ mi}^3 = \text{_____ km}^3$

8) $2450 \text{ mm}^3 = \overset{0.1}{\text{in}^3}$
 $2450 \text{ mm}^3 \times \left(\frac{0.0394 \text{ in}}{1 \text{ mm}} \right)^3$

HOMWORK SOLUTIONS...

Converting English and Metric

- 1) 741.61 cubic feet = 21 cubic meters
- 2) 13.5 square yards = 11.29 square meters
- 3) 26.31 square yards = 22 square meters
- 4) 7 feet = 2.13 meters
- 5) 17.5 yards = 16 meters
- 6) 14.39 cubic yards = 11 cubic meters
- 7) 1 feet = 0.3 meters
- 8) 10 inches = 25.4 centimeters
- 9) 13.73 cubic yards = 10.5 cubic meters
- 10) 335.49 cubic feet = 9.5 cubic meters
- 11) 13.36 miles = 21.5 kilometers
- 12) 17 feet = 5.18 meters
- 13) 2.99 square yards = 2.5 square meters
- 14) 1.24 square inches = 8 square centimeters
- 15) 0.93 square inches = 6 square centimeters
- 16) 4.5 yards = 4.11 meters
- 17) 2 square feet = 0.19 square meters
- 18) 3 cubic feet = 0.08 cubic meters
- 19) 16.4 yards = 15 meters
- 20) 25 inches = 63.5 centimeters

5. Moncton Recreation, Parks and Culture wants to install grass sod on a playground that measures $20\text{ m} \times 40\text{ m}$. Two companies have bid on the job. Company A's bid was $\$4.00/\text{yd}^2$ installed. Company B put in a bid of $\$2.50/\text{m}^2$ plus $\$2000.00$ for installation. Which company should get the job based on the best price?

7. Shelley is trying to decide whether to put hardwood flooring or carpet on her living room floor. The dimensions of the room are 22 ft by 16 ft. The hardwood flooring costs $\$18.99/\text{m}^2$ with an installation cost of $\$1500.00$. The carpet costs $\$21.95/\text{yd}^2$ with an installation cost of $\$1350.00$. Which type of flooring costs less?

9. Irina purchased a farm in the Annapolis Valley of Nova Scotia. She wants to plant balsam fir seedlings, and she estimated the field measures 72 yards by 65 yards. The tree nursery manager told her that each seedling requires an area of 64 ft^2 to grow properly. The seedlings cost \$0.65 each. The nursery sells them in bundles of 20, and she cannot order partial bundles.
- How many seedlings can Irina plant on her acre of land?
 - How much will it cost to purchase the seedlings?



Attachments

Worksheet - Converting Squared and Cubed Units.docx