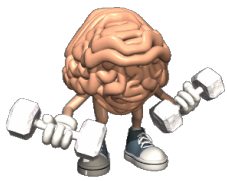# Curriculum Outcome

M3: Solve problems using SI and imperial units that involve linear measurement using estimation and measurement strategies

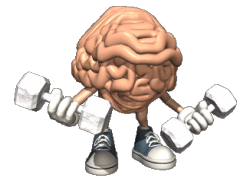**Student Friendly: The relationship between measurement units such as**

       1 ft = 12 in

       1 yd = 3 ft

       1 mi = 1760 ft

Convert each of the following:

a) 112 in = ___9___ ft ___4___ in

b) 18 ft = ___216___ in

c) 3.2 mi = ___202752___ inches

4 1760 X 3 X 12

Do "Ruler Quiz" sheet as well.

1ft = 12in
1yd = 3ft
1mi = 1760yd

Convert each of the following:

1ft = 12in
1yd = 3ft
1mi = 1760yd

a) 112 in = _____ ft _____ in

b) 18 ft = _____ in

c) 3.2 mi = _____ inches

Let's try some more!

Convert each of the following

a) 78 in = _____ ft ___ in

b) 15 ft = _____ in

c) 2.5 mi = _____ in

d) 250 " = _____ ft ____in

e) 500 yds = _____ ft

f) 7' 2" = _____ yd _____ ft ____ in

1ft = 12in

l yd = 3ft = 36in
1mi = 1760yd

a) 78 in = ___6___ ft __6__ in

b) 15 ft = _____ in

c) 2.5 mi = ___158480___ in

2.5 x 1760 X 3 X 12

1ft = 12in

l yd = 3ft = 36in

1mi = 1760yd

d) 250 " = _____ ft

e) 500 yds = _____ ft

f) 7' 2" = ___2___ yd　___1___ ft___2___ in

g) 1 000 000 in = $\underline{15.8}$ mi

$\div 12^{(ft)} \quad \div 3^{(yd)} \div 1760^{miles}$

Factor Label Method

Watch this video for the method

Class/ Homework

Worksheet: Converting Imperial Lengths

(all questions)

And a

Feet to Inches worksheet

Inchto feet

9 miles
to
inches

$$9 \, mi \times \dfrac{1760 \, yd}{1 \, mi} \times \dfrac{3 \, ft}{1 \, yd} \times \dfrac{12 \, in}{1 \, ft} =$$

54184 ft
as miles

$$54184 \text{ ft} \times \frac{1 \text{ yd}}{3 \text{ ft}} \times \frac{1 \text{ mile}}{1760 \text{ yd}} = \frac{54184}{5280}$$

$$= \quad m_i$$

1ft = 12in
1yd = 3ft
1mi = 1760yd

GMF 10 - Imperial Unit Conversion   Name:_____

INSTRUCTIONS: Solve the unit conversion problem by cross cancelling units.

9 miles as inches	=	
17 miles as feet	=	

1ft = 12in
1yd = 3ft
1mi = 1760yd

54184 feet as miles	=	
7 miles as inches	=	
2 miles as inches	=	

1ft = 12in
1yd = 3ft
1mi = 1760yd

824435
inches
as
miles

=

443680
inches
as
miles

=

717897
inches
as
miles

=

TRY THIS ONE...

12. Pierre-Marc converted 21 ft. 9 in. into yards, feet, and inches. His answer was 7 yd. 1 ft. 6 in. Is his answer correct? If your answer is no, show the correct conversion.

1ft = 12in
1yd = 3ft
1mi = 1760yd

1.1 Imperial Measures of Length

Example 2	**Solving a Problem Involving Converting between Units**

Anne is framing a picture.
The perimeter of the framed picture will be 136 in.

a) What will be the perimeter of the framed picture in feet and inches?

b) The framing material is sold by the foot. It costs $1.89/ft. What will be the cost of material before taxes?

1ft = 12in
1yd = 3ft
1mi = 1760yd

* <u>Perimeter</u> - distance around the figure

1.1 Imperial Measures of Length

Example 2	**Solving a Problem Involving Converting between Units**

Anne is framing a picture.
The perimeter of the framed picture will be 136 in.

a) What will be the perimeter of the framed picture in feet and inches?

1ft = 12in
1yd = 3ft
1mi = 1760yd

CHECK YOUR UNDERSTANDING

1.1 Imperial Measures of Length

| **Example 2** | **Solving a Problem Involving Converting between Units** |

Anne is framing a picture.
The perimeter of the framed picture will be 136 in.

b) The framing material is sold by the foot. It costs $1.89/ft.
   What will be the cost of material before taxes?

CHECK YOUR UNDERSTANDING

1.1 Imperial Measures of Length

2. Ben buys baseboard for a bedroom. The perimeter of the bedroom, excluding closets and doorway, is 37 ft.

   a) What length of baseboard is needed, in yards and feet?

   b) The baseboard material is sold by the yard. It costs $5.99/yd. What is the cost of material before taxes?

1ft = 12in
1yd = 3ft
1mi = 1760yd

Class/ Homework

Textbook Handout

p. 150: #1 to 6 and 8

1ft = 12in
1yd = 3ft
1mi = 1760yd

Attachments

Worksheet - Converting Measurements.docx

Worksheet - Converting Imperial Lengths.docx

Worksheet2_ Inches to feet.pdf