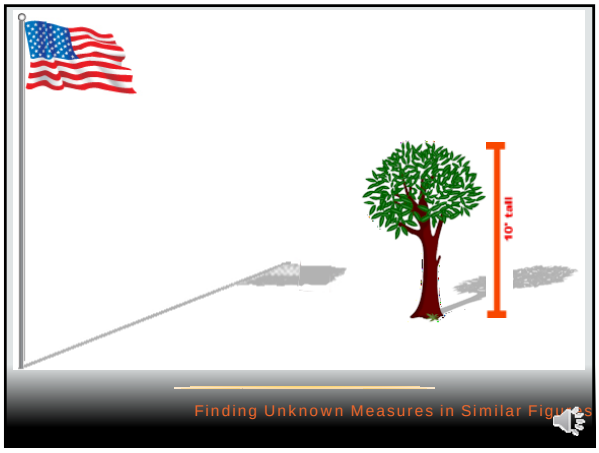
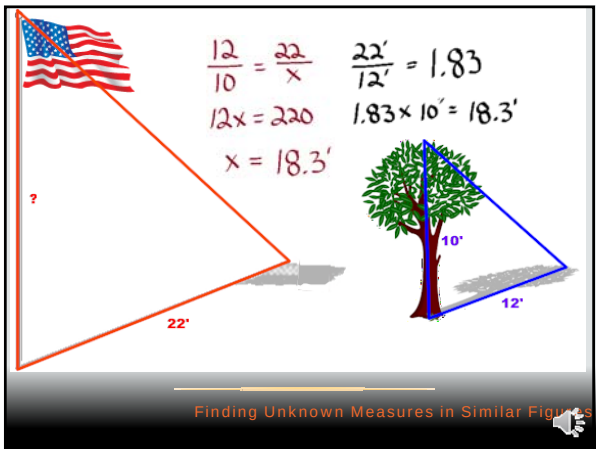
MasterMath

NUMBER SENSE

Finding Unknown Measures in Similar Figures




$\frac{12}{10} = \frac{22}{x}$
$12x = 220$
$x = 18.3'$
$\frac{22'}{12'} = 1.83$
$1.83 \times 10' = 18.3'$
?
22'
10'
12'
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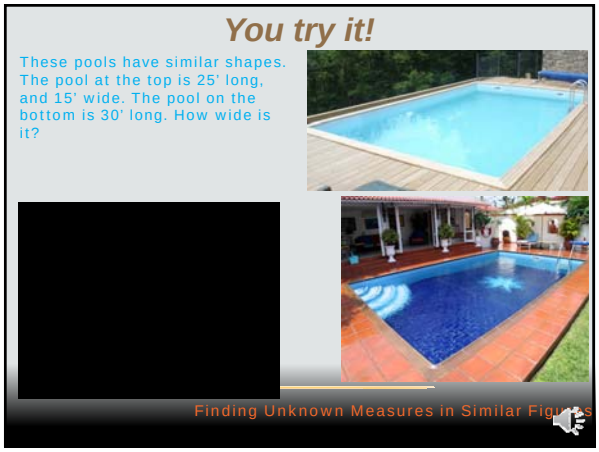
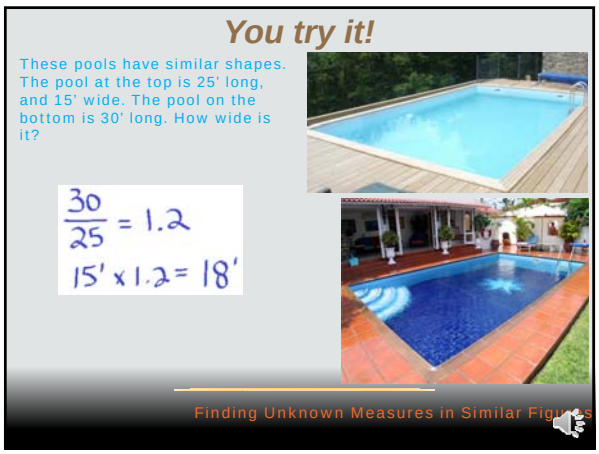

You try it!
These pools have similar shapes. The pool at the top is 25' long, and 15' wide. The pool on the bottom is 30' long. How wide is it?
Finding Unknown Measures in Similar Figures


You try it!
These pools have similar shapes. The pool at the top is 25' long, and 15' wide. The pool on the bottom is 30' long. How wide is it?
$\frac{30}{25} = 1.2$
$15' \times 1.2 = 18'$
Finding Unknown Measures in Similar Figures

You try it!

These pools have similar shapes. The pool at the top is 25' long, and has perimeter of 80'. The pool on the bottom is 30' long. What is it's perimeter?

Finding Unknown Measures in Similar Figures

You try it!

These pools have similar shapes. The pool at the top is 25' long, and has perimeter of 80'. The pool on the bottom is 30' long. What is it's perimeter?

$\frac{30}{25} = 1.2$

$80' \times 1.2 = 96'$

Finding Unknown Measures in Similar Figures

You try it!

These pools have similar shapes. The pool at the top is 25' long, and has an area of 375 sq ft. The pool on the bottom is 30' long. What is it's area?

Finding Unknown Measures in Similar Figures

You try it!

These pools have similar shapes. The pool at the top is 25' long, and has an area of 375 sq ft. The pool on the bottom is 30' long. What is it's area?

$\frac{25}{30} = .8\overline{3}$

$.8\overline{3}^2 = .69\overline{4}$

$375 = .69\overline{4} \cdot x$

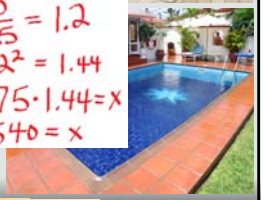
$540 = x$

$\frac{30}{25} = 1.2$

$1.2^2 = 1.44$

$375 \cdot 1.44 = x$

$540 = x$



Finding Unknown Measures in Similar Figures

You try it!

Four bags of fertilizer are required for this garden. You plan to build another garden of similar shape. The perimeter of the new garden will be 50% the perimeter of the first garden. How many bags of fertilizer will you need for the new garden?

Finding Unknown Measures in Similar Figures

You try it!

Four bags of fertilizer are required for this garden. You plan to build another garden of similar shape. The perimeter of the new garden will be 50% the perimeter of the first garden. How many bags of fertilizer will you need for the new garden?

$50\% = .5$

$.5^2 = .25$

$.25 \times 4 = 1$

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