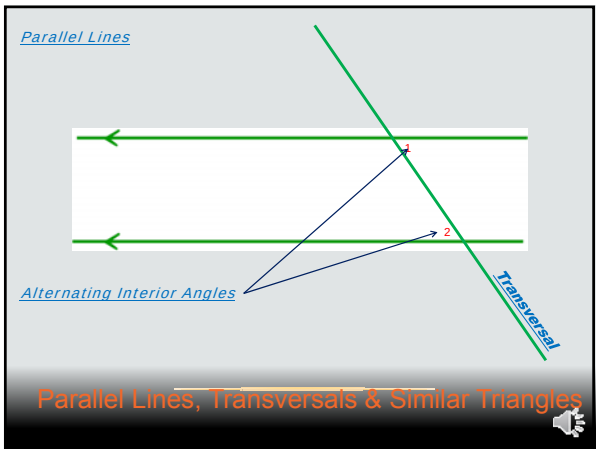
MasterMath

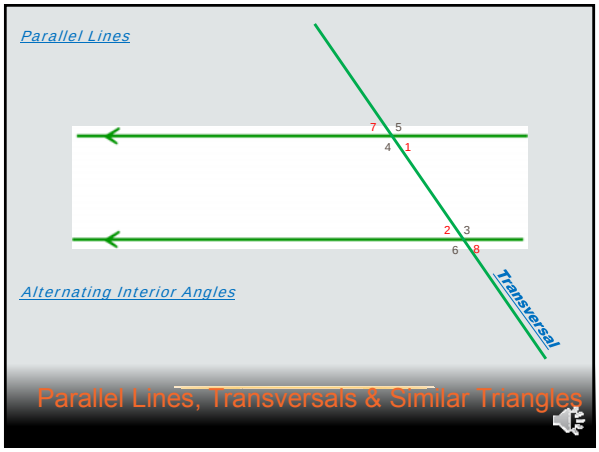
GEOMETRY

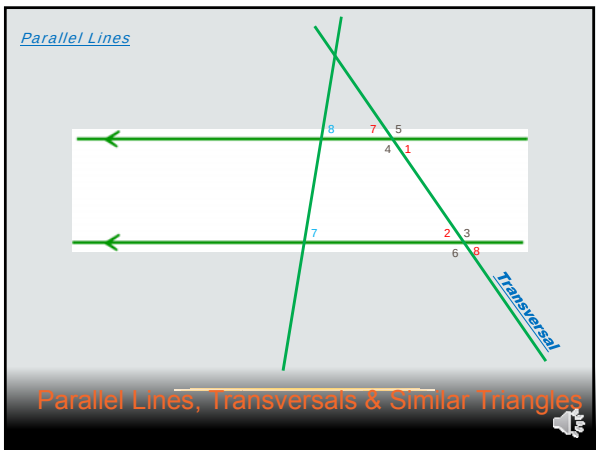
Parallel Lines, Transversals & Similar Triangles

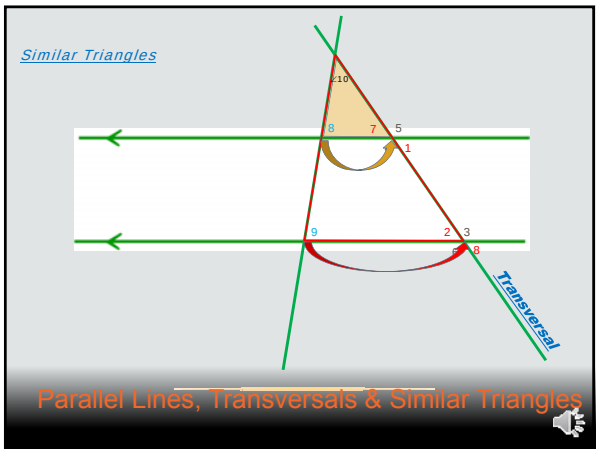
Parallel Lines, Transversals & Similar Triangles

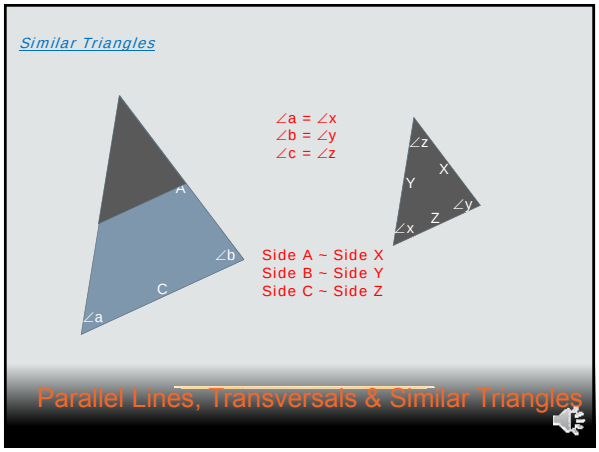
Parallel Lines, Transversals & Similar Triangles

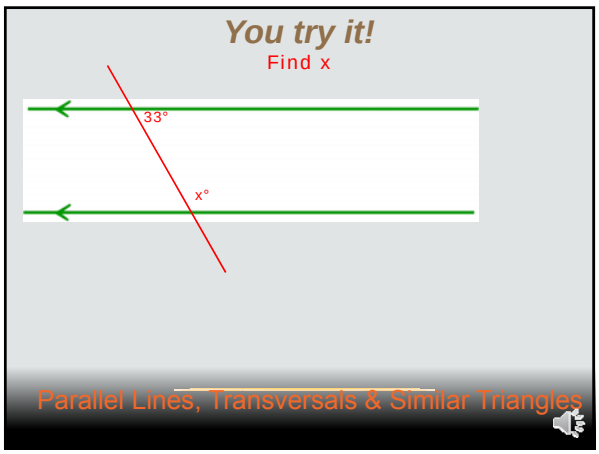

Parallel Lines
1
2
Alternating Interior Angles
Transversal
Parallel Lines, Transversals & Similar Triangles

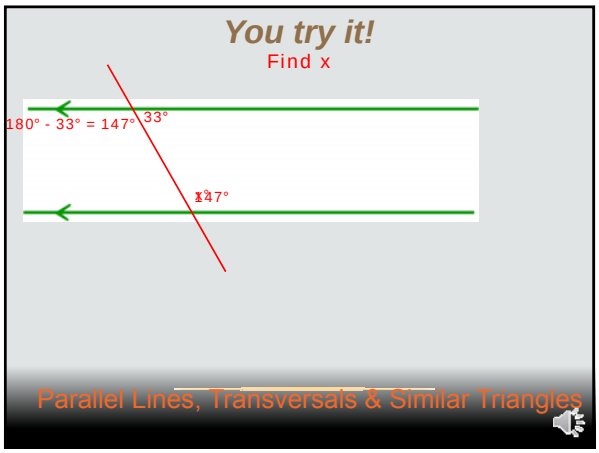

Parallel Lines
7
5
4
1
2
3
6
8
Alternating Interior Angles
Transversal
Parallel Lines, Transversals & Similar Triangles

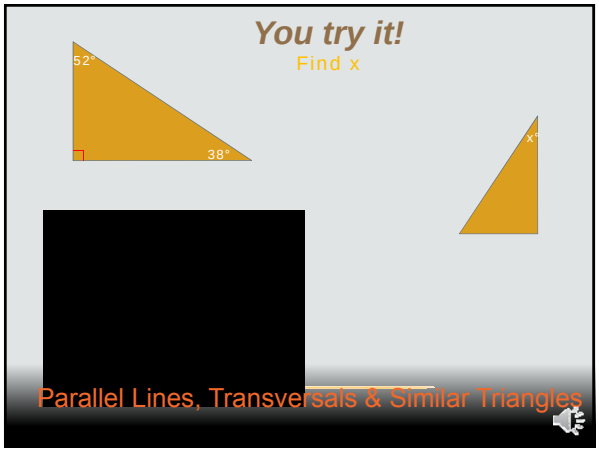

Parallel Lines
8
7
5
4
1
7
2
3
6
8
Transversal
Parallel Lines, Transversals & Similar Triangles

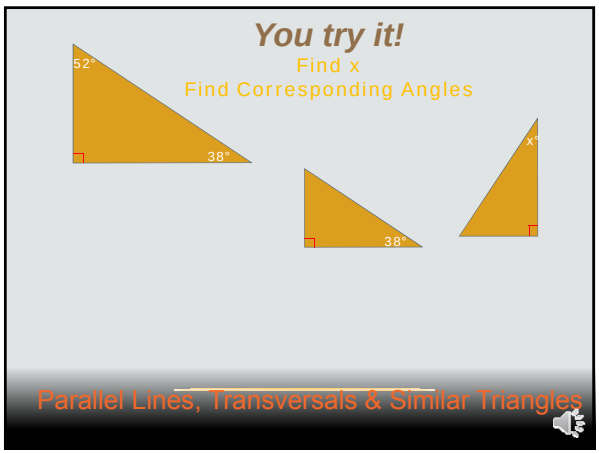

Similar Triangles
10
8
7
5
1
9
2
3
6
8
Transversal
Parallel Lines, Transversals & Similar Triangles


Similar Triangles
∠a = ∠x
∠b = ∠y
∠c = ∠z
A
∠b
C
∠a
∠z
X
Y
∠y
∠x
Z
Side A ~ Side X
Side B ~ Side Y
Side C ~ Side Z
Parallel Lines, Transversals & Similar Triangles


You try it!
Find x
33°
x°
Parallel Lines, Transversals & Similar Triangles

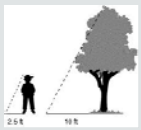

You try it!
Find x
180° - 33° = 147°
33°
147°
Parallel Lines, Transversals & Similar Triangles


You try it!
Find x
52°
38°
x°
Parallel Lines, Transversals & Similar Triangles


You try it!
Find x
Find Corresponding Angles
52°
38°
38°
x°
Parallel Lines, Transversals & Similar Triangles

You try it!

The sun casts a shadow of both the tree and the boy. If the boy is 5' high, how tall is the tree?



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You try it!

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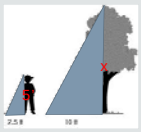


$$\frac{10'}{2.5'} = \frac{x}{5'}$$

$$\frac{5 \cdot 10}{2.5} = \frac{5x}{5}$$

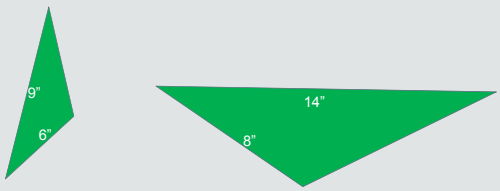
$$\frac{50}{2.5} = x$$

$$20' = x$$

Parallel Lines, Transversals & Similar Triangles

You try it!

Are these triangles similar?



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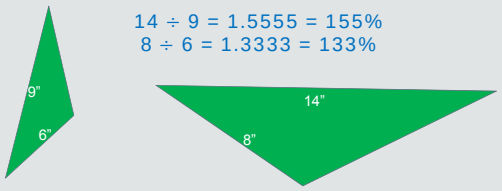
You try it!

Are these triangles similar?



14 ÷ 9 = 1.5555 = 155%
8 ÷ 6 = 1.3333 = 133%

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You try it!

Now, try it on your own. Go to
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from the Worksheets Page, and test your skill. Then see how much you understand by taking the Subject Quiz.

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