What's Going On?

Checking In	F.F.M.
Minds on	Which tool?
Action!	How can I find thee? Let me count the ways...
Consolidation	Assignment

Learning Goal - I will be able to identify when to use sin, cos, tan, $\sin^{-1}$, $\cos^{-1}$, $\tan^{-1}$ or The Pythagorean Theorem.

Checking In

R.A.F.T.

If you forgot your book, go get it now.

If you are late, you are late.

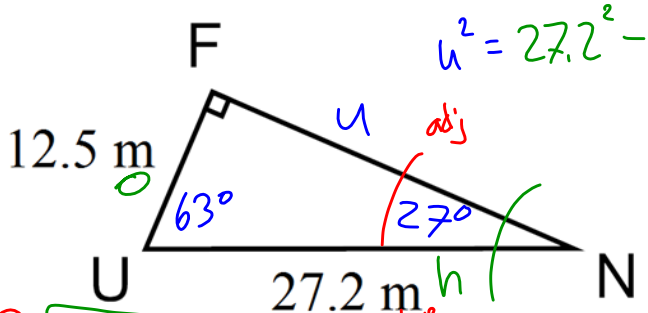
Checking In

TEST
Wednesday

Checking In

F.F.M. - Entry Card

Solve the triangle below.



$u^2 = 27.2^2 - 12.5^2$

u adj

27°

h

hyp

① Find ∠N, ∠U or side u

$\sin(N) = \frac{12.5}{27.2}$

$\sin(N) = 0.4596$

$N = \sin^{-1}(0.4596)$

$N = 27°$

② Find ∠U

$U = 90 - 27$

$= 63°$

③ Find u

$\cos(27°) = \frac{u}{27.2}$

$0.8910 = \frac{u}{27.2}$

$24.2 = u$

$u = 24.2$

$F = 90°$ $f = 27.2\text{ m}$

$U = 63°$ $u = 24.2\text{ m}$

$N = 27°$ $n = 12.5\text{ m}$

Minds on

What's in Our Toolbox?

Finding Sides

sin

Used to find a side of a right triangle given an angle and either the opposite or the hypotenuse.

---

cos

Used to find a side of a right triangle given an angle and either the adjacent or the hypotenuse.

---

tan

Used to find a side of a right triangle given an angle and either the opposite or the adjacent side.

The Pythagorean Theorem

Used to find a side of a right triangle given the other two sides.

Minds on

What's in Our Toolbox?

Finding Angles

$\sin^{-1}$

Used to find an angle given the side opposite the angle and the hypotenuse.

$\cos^{-1}$

Used to find an angle given the side adjacent to the angle and the hypotenuse.

$\tan^{-1}$

Used to find an angle given the side opposite the angle and the side adjacent to the angle.

What Would You Use?

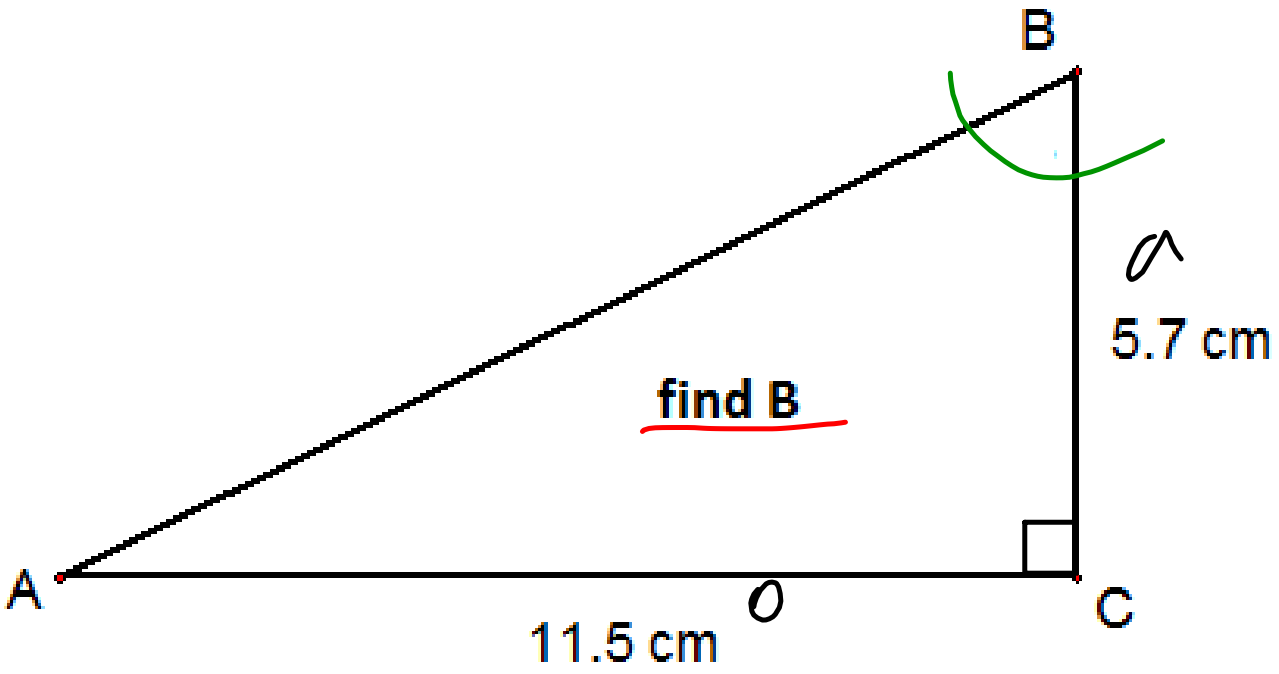
Grade: 10

Subject: Trigonometry

Date: October 7

a) sin b) cos c) tan d) $\sin^{-1}$ e) $\cos^{-1}$ f) $\tan^{-1}$ ✓

g) The Pythagorean Theorem



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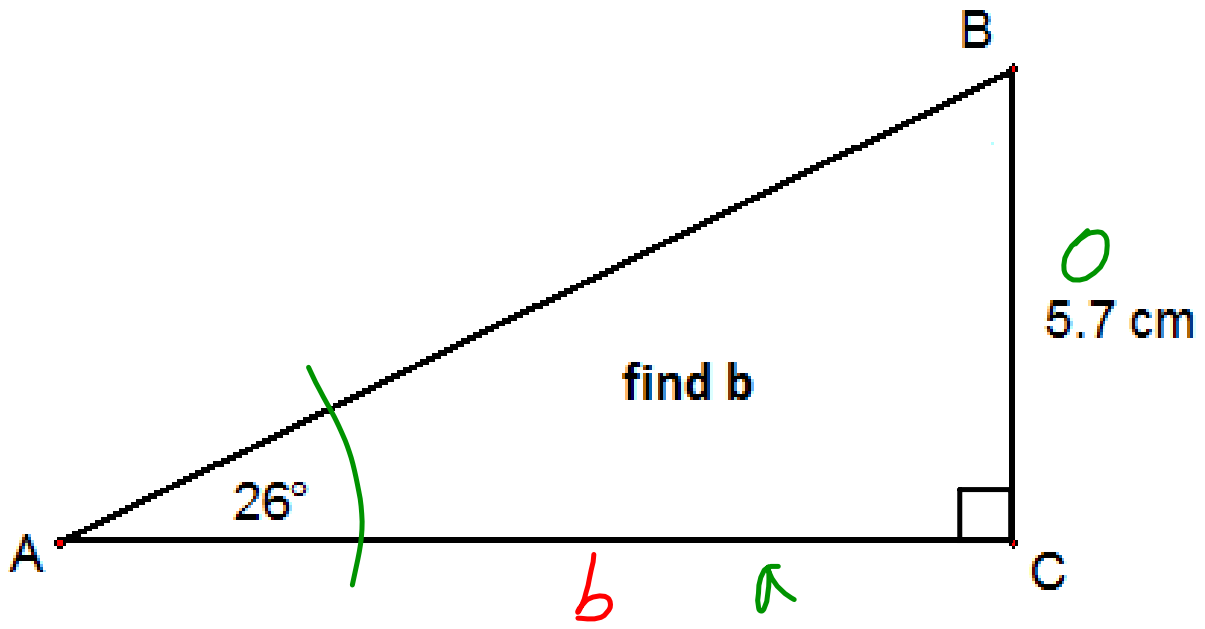
g) The Pythagorean Theorem



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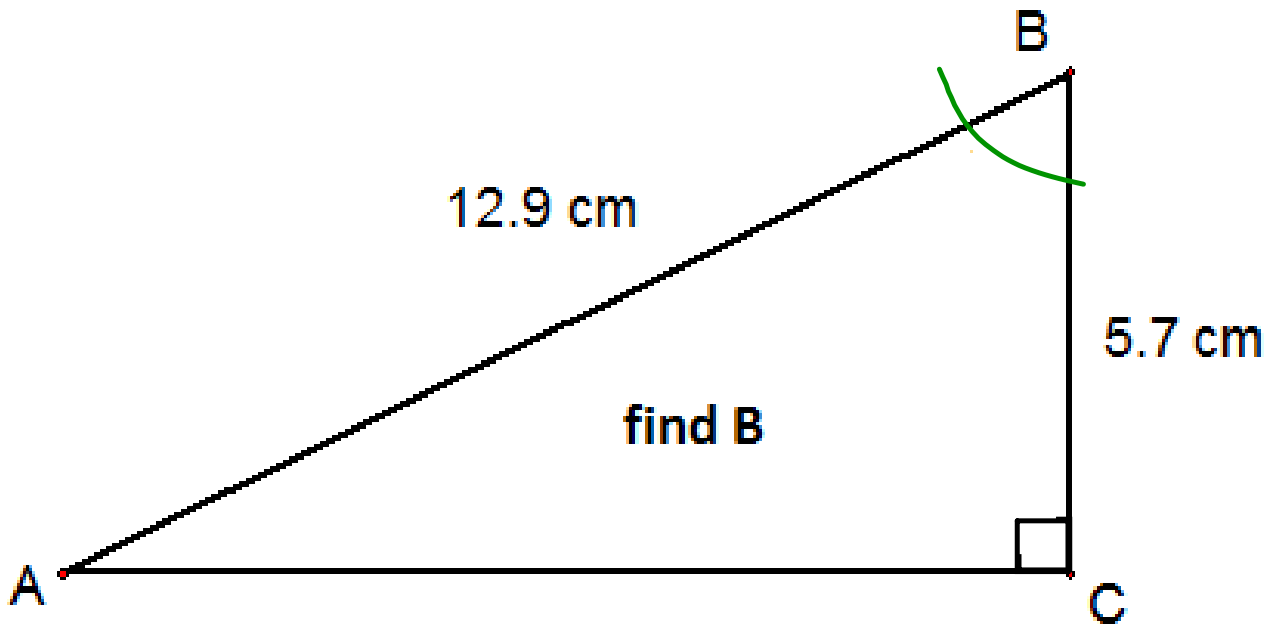
g) The Pythagorean Theorem



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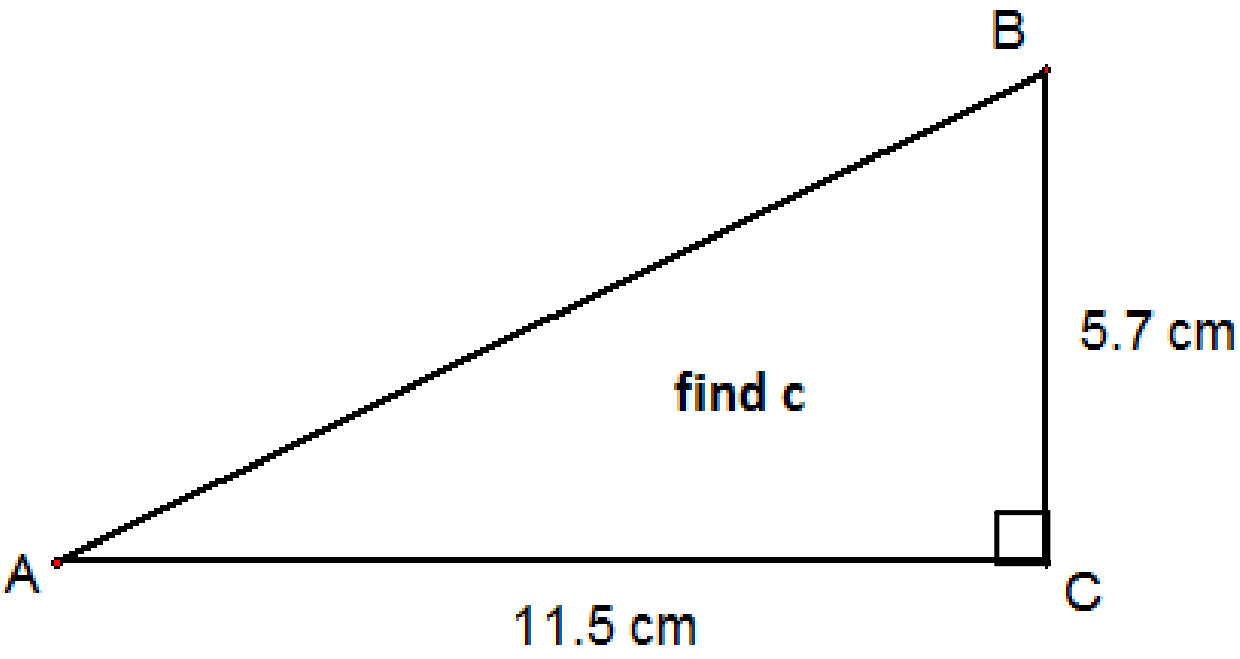

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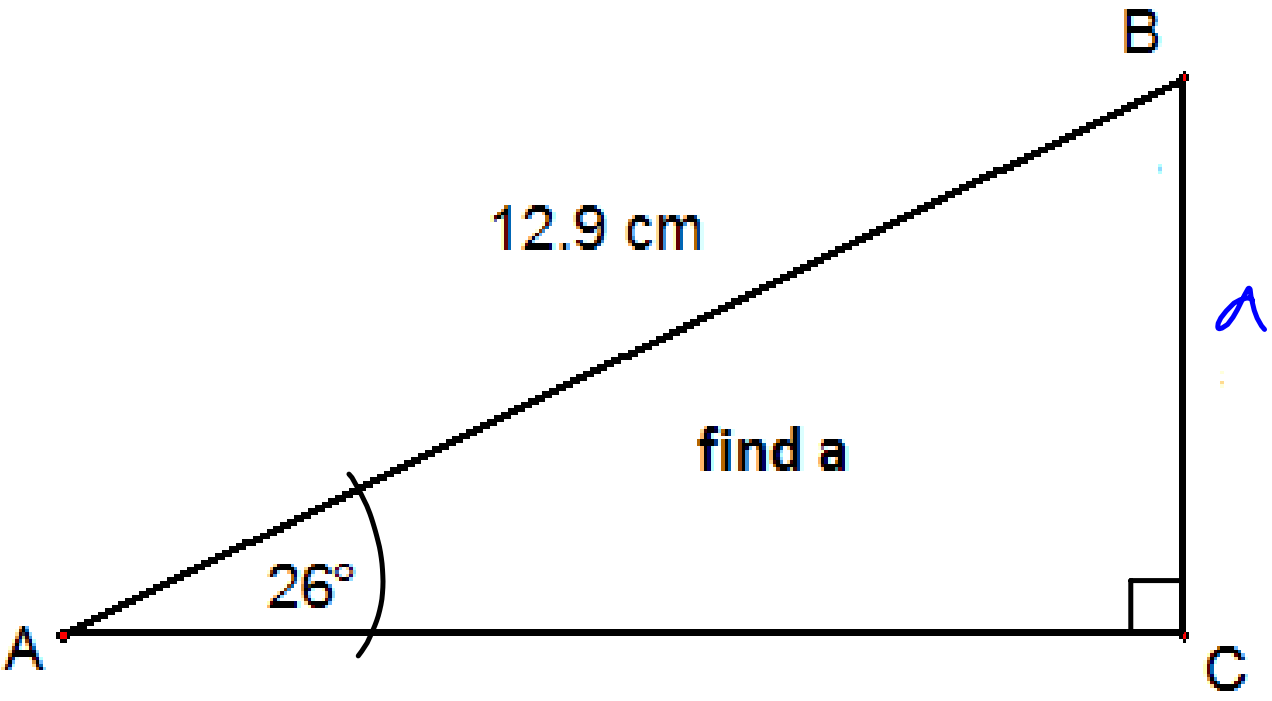
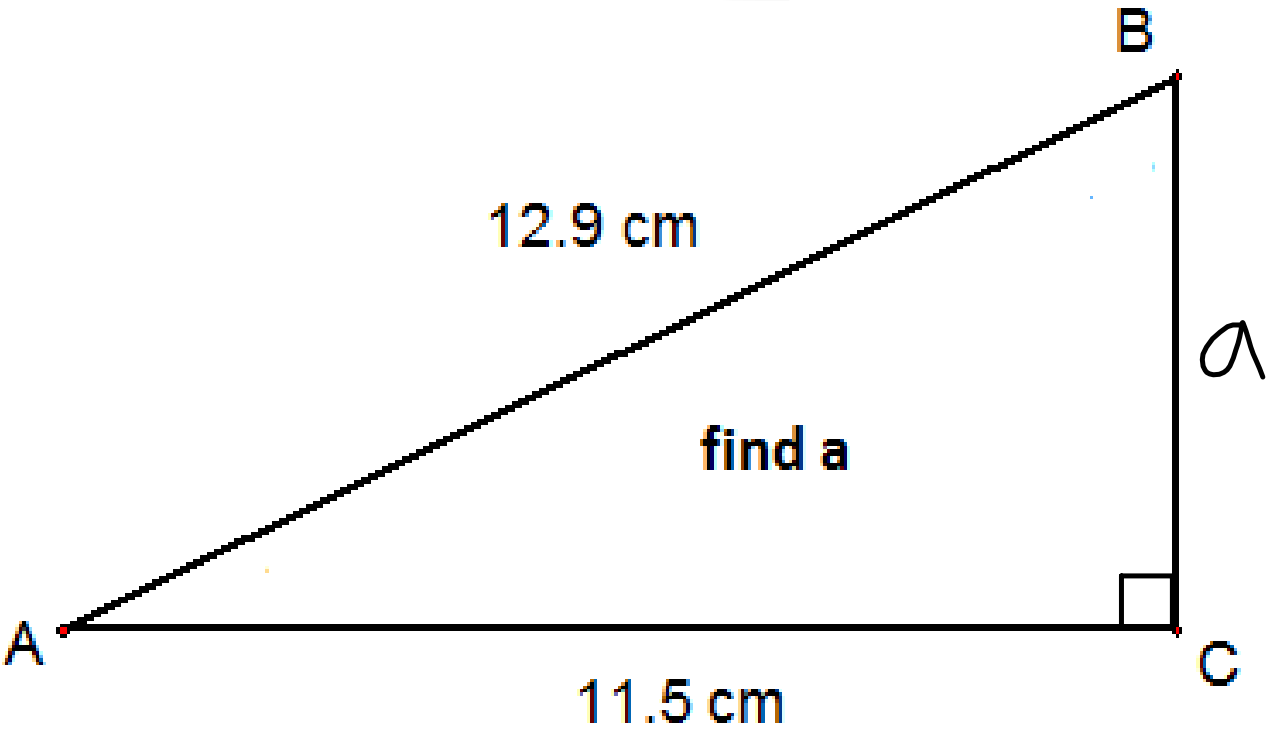
g) The Pythagorean Theorem



a) sin b) cos c) tan ~~d) $\sin^{-1}$~~ ~~e) $\cos^{-1}$~~ ~~f) $\tan^{-1}$~~

g) The Pythagorean Theorem



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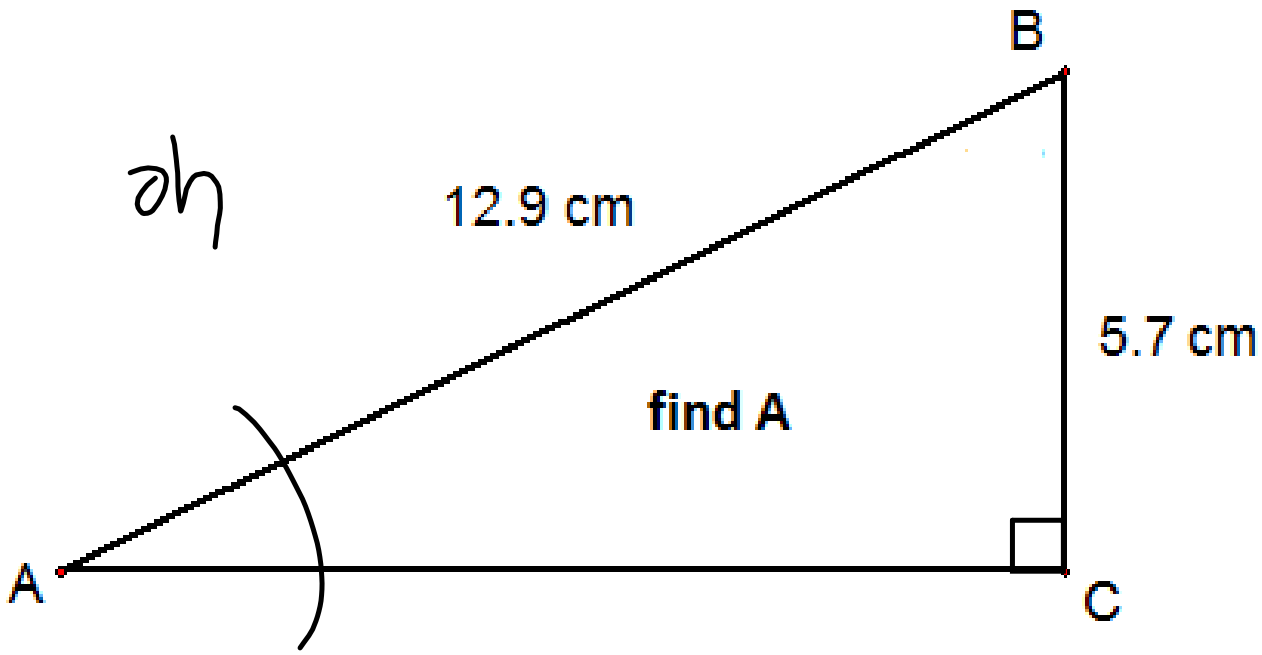

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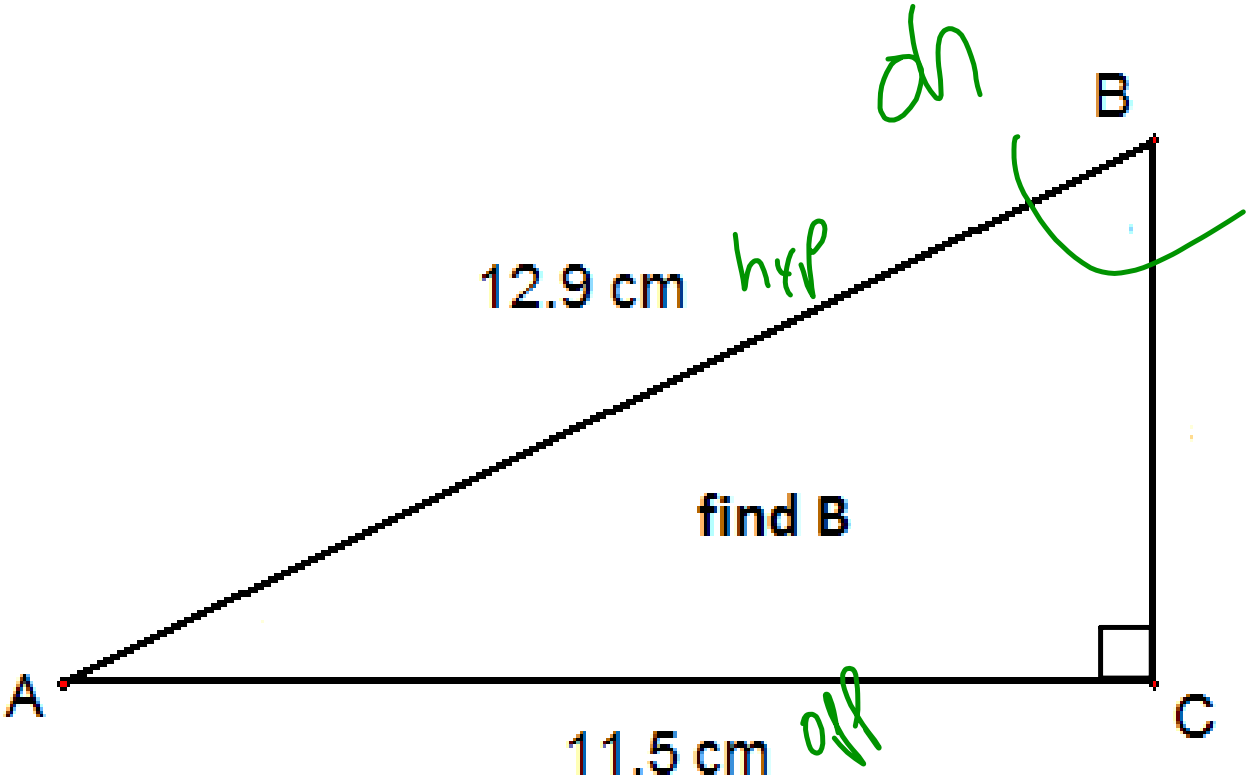
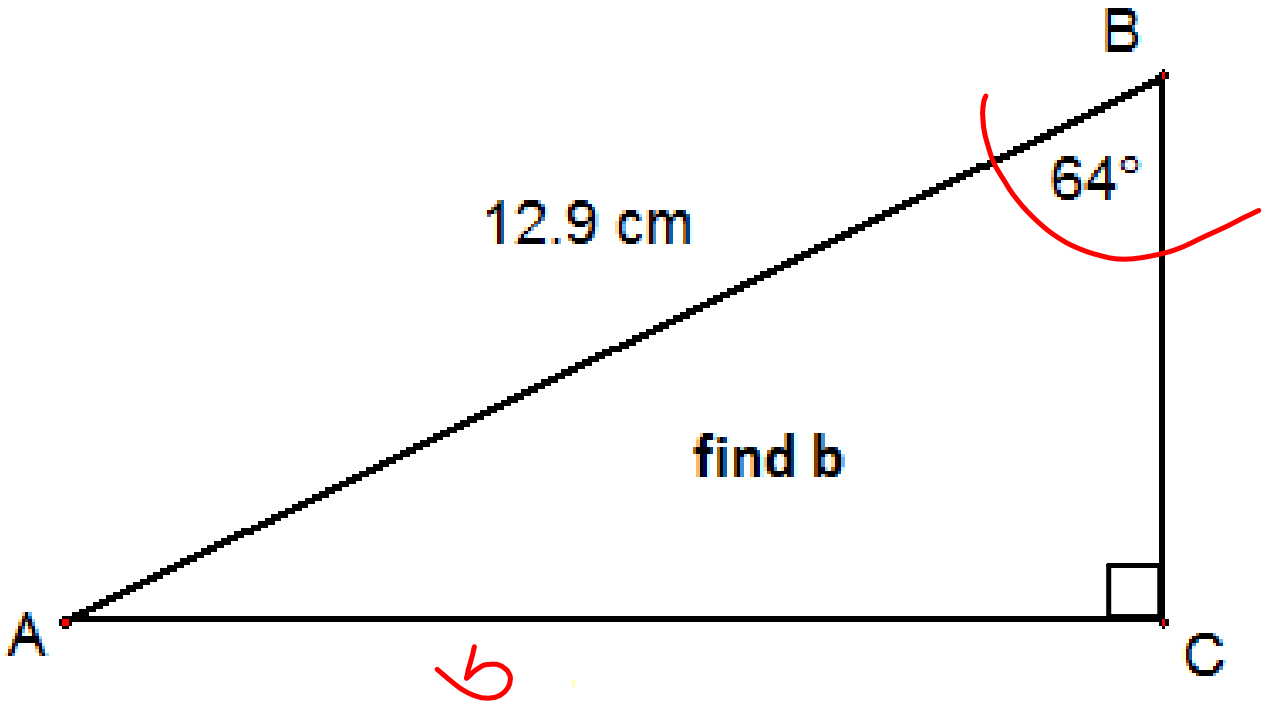


a) sin b) cos c) tan d) $\sin^{-1}$ e) $\cos^{-1}$ f) $\tan^{-1}$

g) The Pythagorean Theorem



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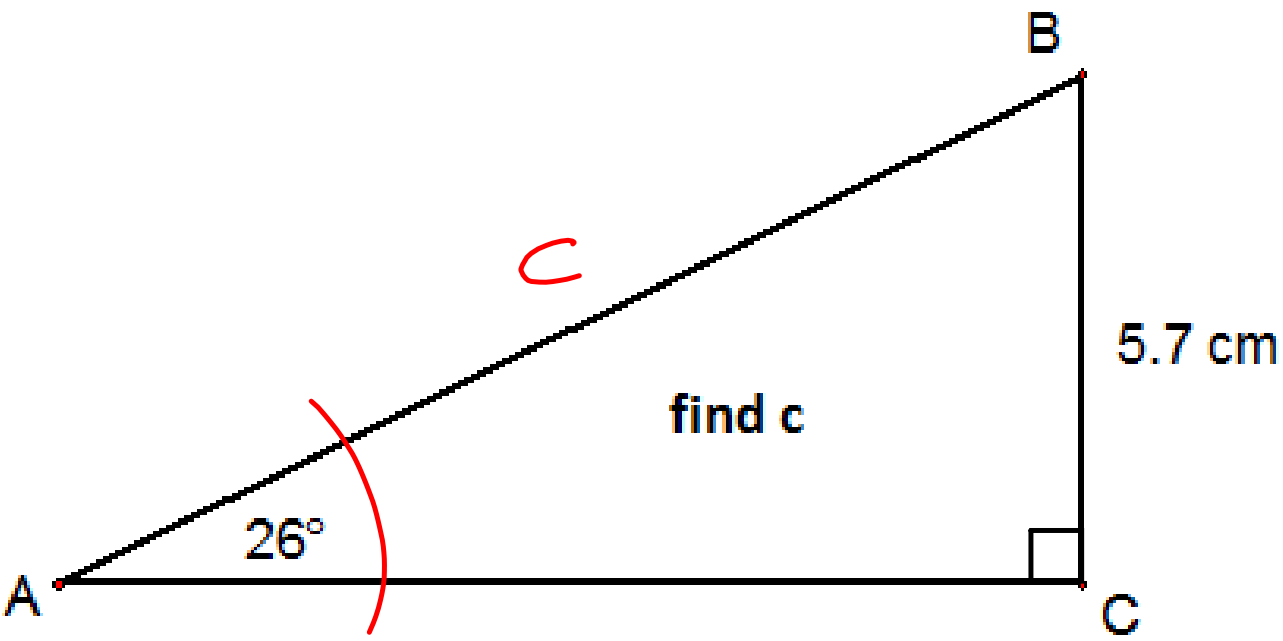

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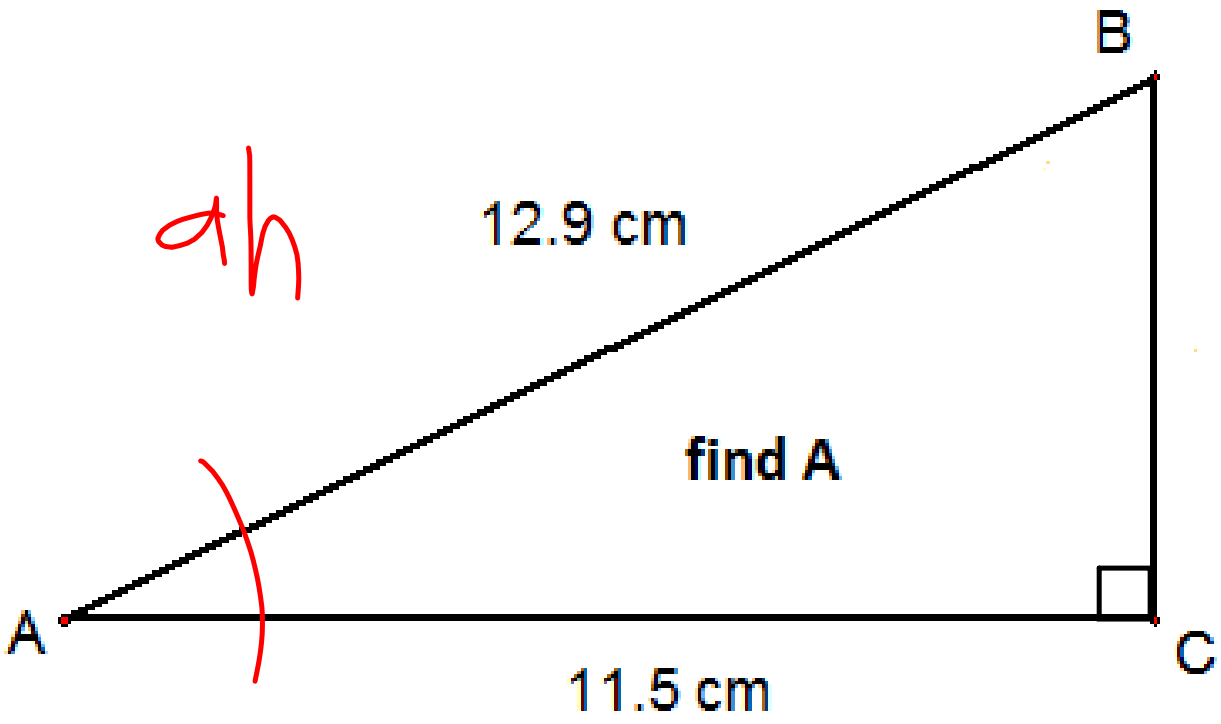

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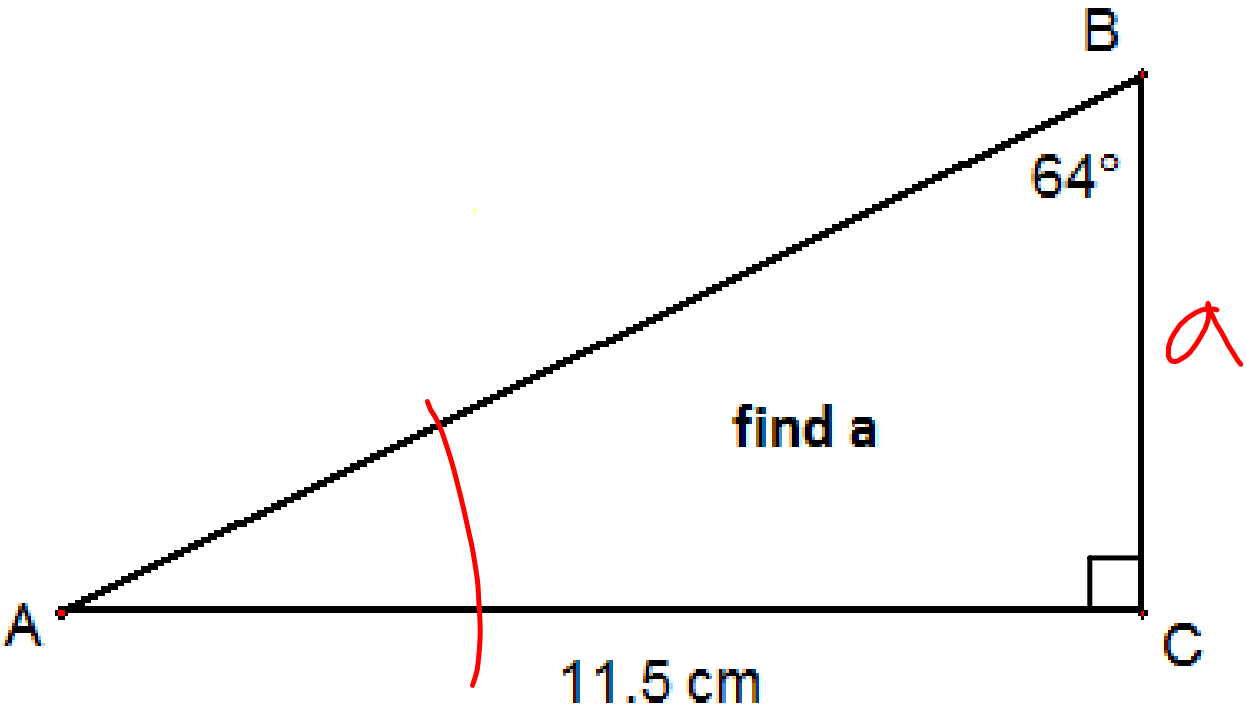

Consolidation

Assignment

TIPS

A smokestack, **AB**, is 205m high. From two points C and D on the **same side** of the smokestack's base B, the angles of elevation to the top of the smokestack are 40^o and 36^o respectively.

Find the distance between C and D.