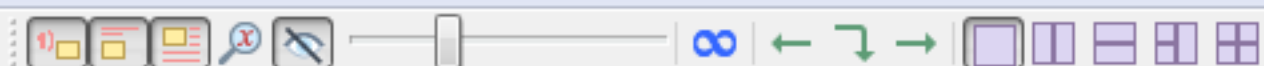
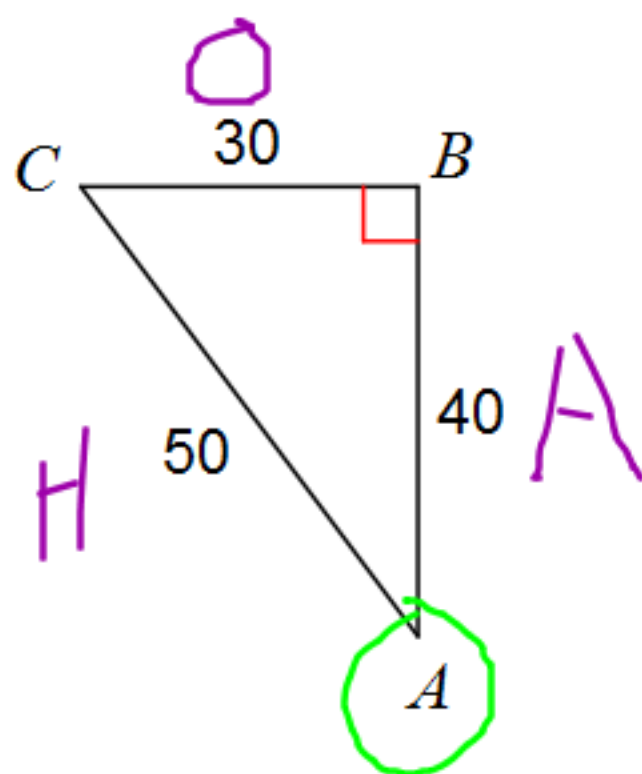


Review
+
Angles of
Elevation + Depression



Find the value of each trigonometric ratio to the nearest ten-thousandth.

6) $\cos A$

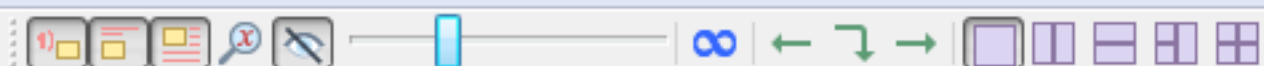


$$\cos A = \frac{A}{H}$$

$$\cos A = \frac{40}{50}$$

$$\cos A = 0.8$$

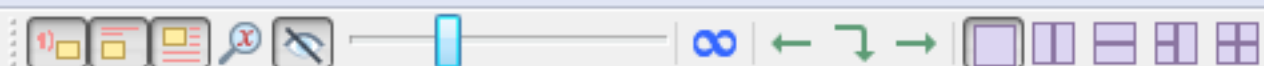
$$\cos^{-1} = 37^\circ$$



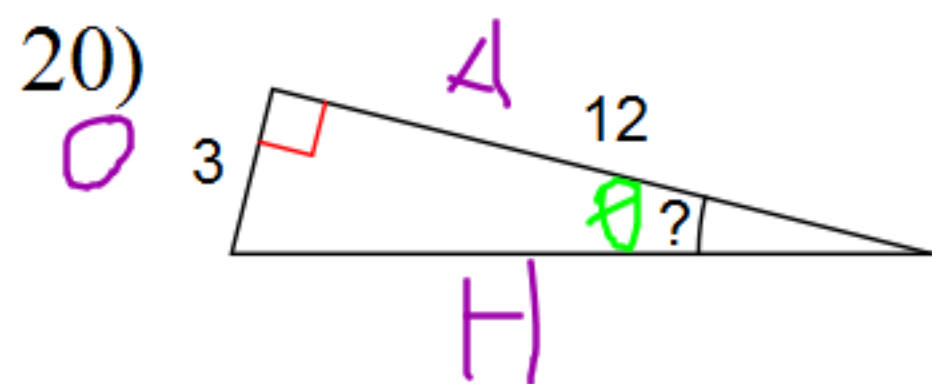
Find each angle measure to the nearest degree.

16) $\tan U = 2.4751$

$$\tan^{-1} 2.4751$$
$$= 68^\circ$$



Find the measure of the indicated angle to the nearest degree.



$$\tan \theta = \frac{O}{A}$$

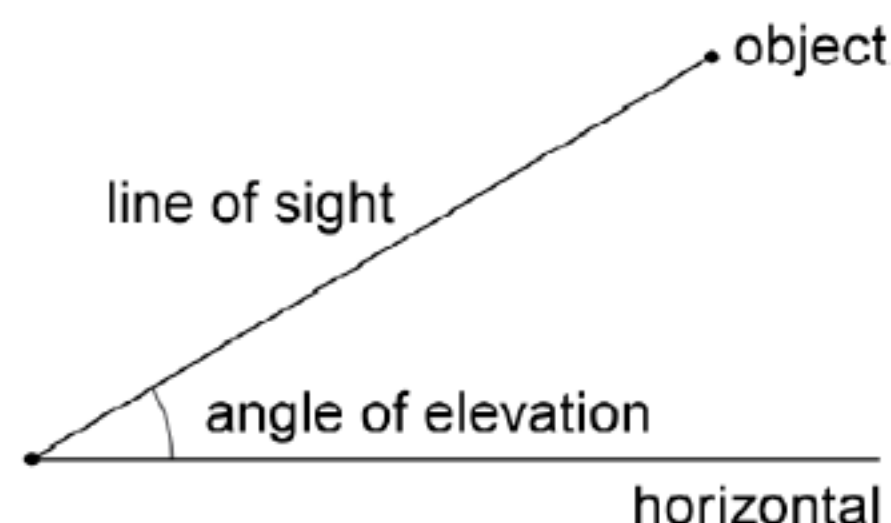
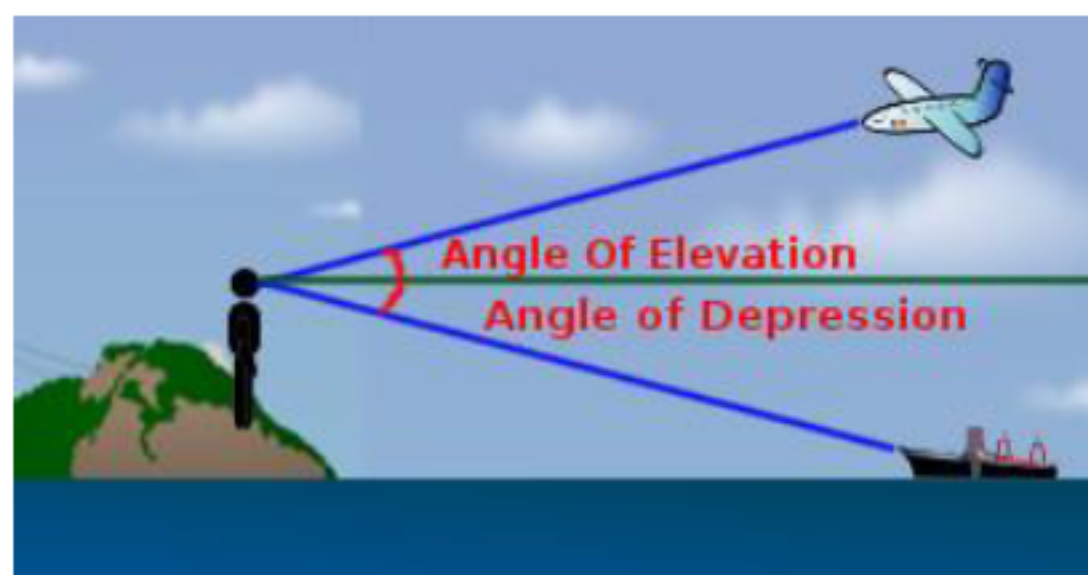
$$\tan \theta = \frac{3}{12}$$

$$\tan \theta = 0.25$$

$$\tan^{-1} = 14^\circ$$

Angle Of Elevation

When you see an object above you there is an angle of elevation between the horizontal and your line of sight.



Let's Practise

The angle of elevation of the top of a tree is 30° from a point 28 ft away from the foot of the tree. Find the height of the tree rounded to the nearest feet.



$$\tan \theta = \frac{O}{A}$$

$$\tan 30^\circ = \frac{x}{28}$$

$$x = (\tan 30^\circ)(28)$$

$$x = 16$$

∴ The height of the tree is 16 ft.

Export PDF

Adobe Export PDF

Convert PDF Files to Word or Excel Online

Select PDF File

Trig Lesson Notes.pdf

Convert to

Microsoft Word (*.docx)

Document Language:
English (U.S.) [Change](#)

Convert

Create PDF

Edit PDF

Comment

Combine Files

Organize Pages

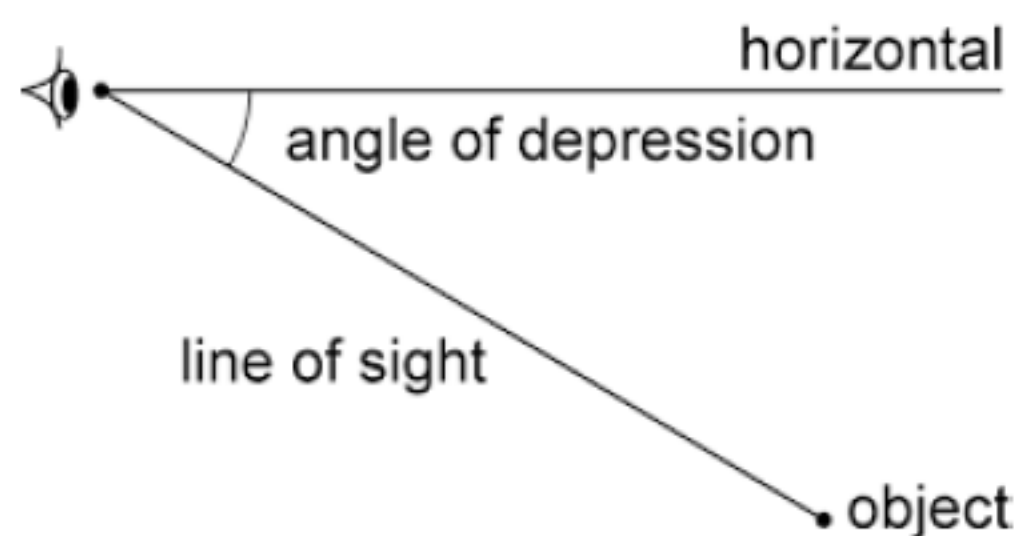
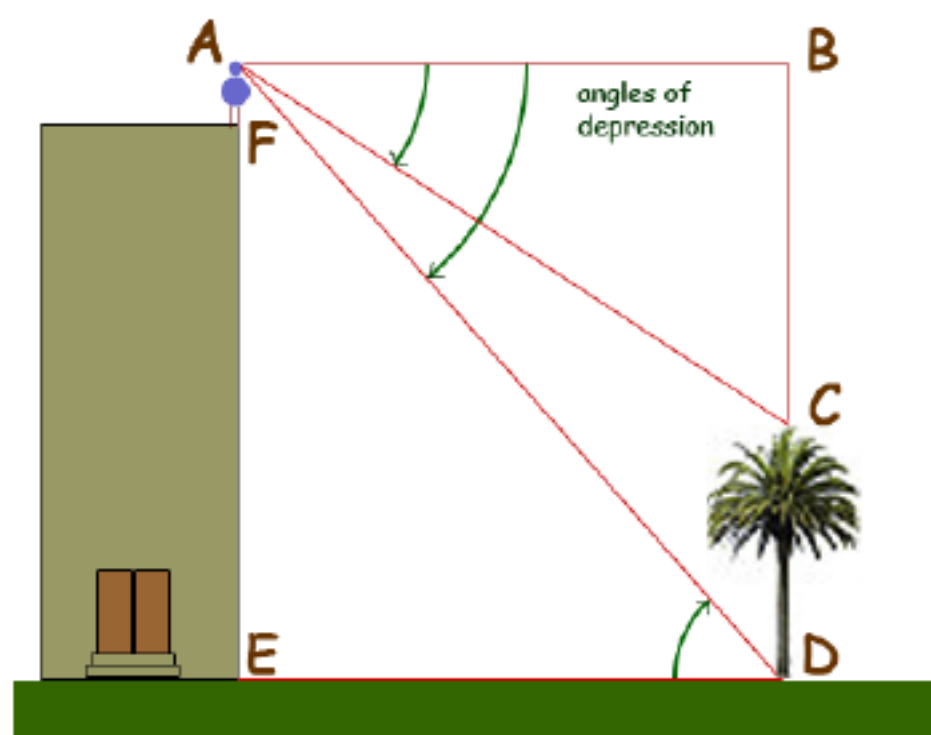
Fill & Sign

Store and share files in the Document Cloud

[Learn More](#)

Angle Of Depression

When you see an object below you there is an angle of depression between the horizontal and your line of sight.



Let's Practise

A great white shark swims 22ft below sea level. If the shark is 67.7 feet from the sailboat, what is the angle of depression of the boat to the shark?

Export PDF

Adobe Export PDF

Convert PDF Files to Word or Excel Online

Select PDF File

Trig Lesson Notes.pdf x

Convert to

Microsoft Word (*.docx) v

Document Language:
English (U.S.) [Change](#)

Convert

Create PDF v

Edit PDF v

Comment

Combine Files v

Organize Pages v

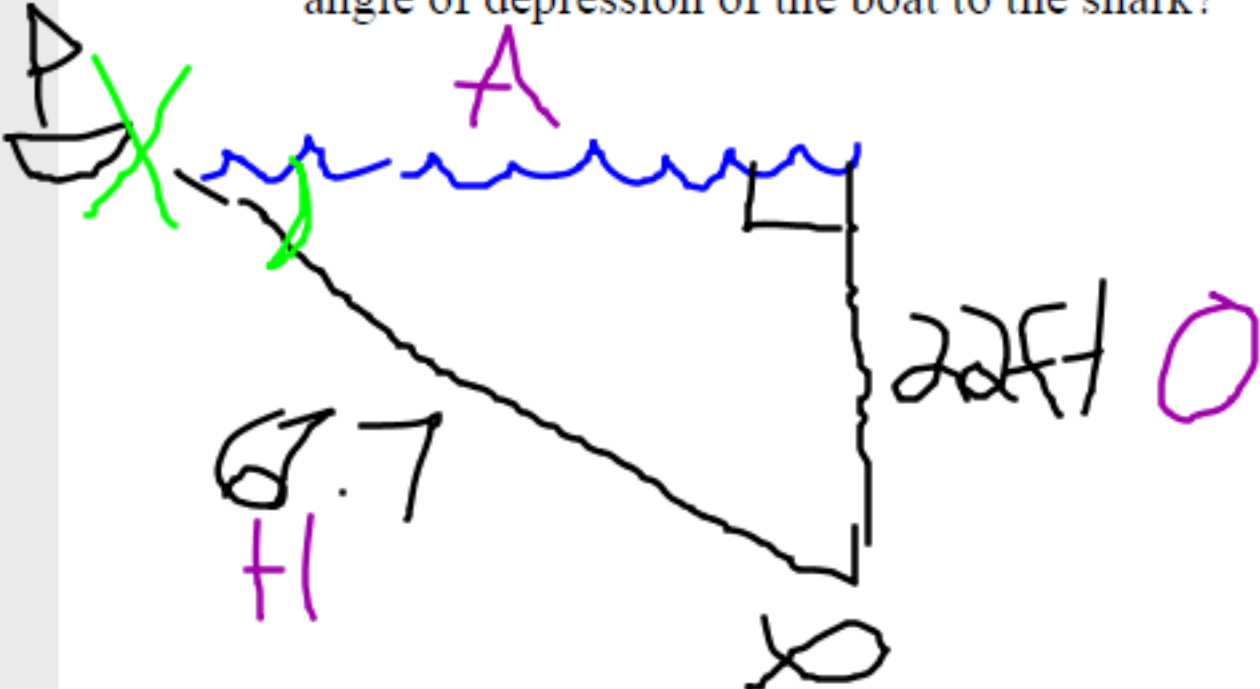
Fill & Sign

Store and share files in the
Document Cloud

[Learn More](#)

Let's Practise

A great white shark swims 22ft below sea level. If the shark is 67.7 feet from the sailboat, what is the angle of depression of the boat to the shark?



$$\sin X = \frac{O}{H}$$

$$\sin X = \frac{22}{67.7}$$

$$\sin X = 0.32$$

$$\sin^{-1} X = 18.6$$

The angle of depression from the boat to the shark is 18.6° .

Export PDF

Adobe Export PDF

Convert PDF Files to Word or Excel Online

Select PDF File

Trig Lesson Notes.pdf x

Convert to

Microsoft Word (*.docx) v

Document Language:
English (U.S.) [Change](#)

Convert

Create PDF v

Edit PDF v

Comment

Combine Files v

Organize Pages v

Fill & Sign

Store and share files in the
Document Cloud

[Learn More](#)