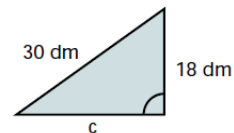
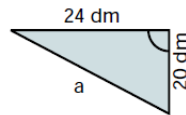
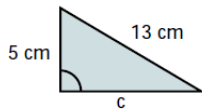
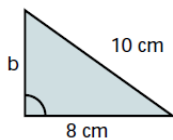


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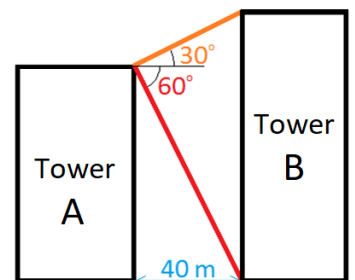
- 1** Calculate the length of the hypotenuse:
- The lengths of the catheti are: 3 m and 4 m
 - The lengths of the catheti are: 38 mm and 12 mm
 - The lengths of the catheti are: 20 cm and 15 cm

- 2** Calculate the length of the other cathetus:
- Hypotenuse = 14 m ; cathetus = 6 m
 - Hypotenuse = 10 m ; cathetus = 4 m
 - Hypotenuse = 26 cm ; cathetus = 16 cm
 - Hypotenuse = 15 m ; cathetus = 14 m

- 3** Find the missing values:

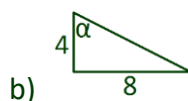
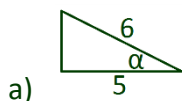


- 4** Two towers are separated by a distance of 40 m. From the top of tower A, the **angle of depression** to the base of tower B is 60° and the **angle of elevation** to the top of tower B is 30° . We can use the calculator to find the tangent of 30° and the tangent of 60° . If we know the tangent and the adjacent sides, we can calculate the opposite sides.



What is the height of the tower B?

- 5** Calculate the trigonometric ratios for α in these triangles:



- 6** <https://www.youtube.com/watch?v=NKEWjuYbBHg> Using the calculator find:
- $\sin 32^\circ 29' 14''$
 - $\cos 18^\circ 9' 45''$
 - $\tan 5^\circ 58' 1''$

- 7** <http://www.youtube.com/watch?v=VRz2d5yedsg>

- What does the "little box" indicate?
- What is the "special name" of the longest side of the triangle?
- What is the "adjacent side"?
- Calculate the value of the angle if the hypotenuse is 6 cm long and the opposite side is 5 cm long.
- Calculate the value of the angle if the opposite side is 65 m and the adjacent side is 72 m.