UNIT 5 SURVIVAL GUIDE: Trigonometry
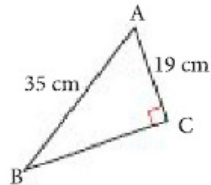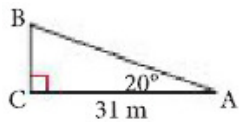
PRIMARY TRIG RATIOS	THE SINE LAW	THE COSINE LAW
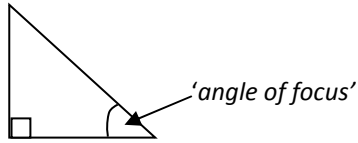
PRIMARY TRIG RATIOS

'angle of focus'

$\sin \theta =$ —— $\cos \theta =$ —— $\tan \theta =$ ——

- use _____ to remember the relationships
- only to be used for _____
- use sin, cos and tan and cross multiply to find _____
- use $\sin^{-1}$, $\cos^{-1}$ and $\tan^{-1}$ to find _____

Solve each triangle.

B, 20°, C, 31 m, A

A, 35 cm, 19 cm, C, B

THE SINE LAW

$$\frac{\ \ }{\ \ } = \frac{\ \ }{\ \ } = \frac{\ \ }{\ \ } \quad \text{or} \quad \frac{\ \ }{\ \ } = \frac{\ \ }{\ \ } = \frac{\ \ }{\ \ }$$
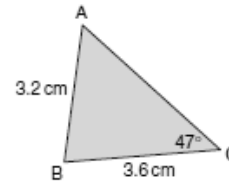
When to use:
- when given a pair of opposites (side and angle) plus another piece of information
- Remember you can always find the 3rd angle by subtracting the other two from 180°

Remember to start with what you don't know!

Find c.
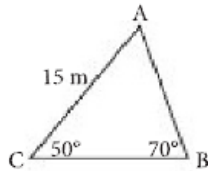
A, 15 m, 50°, 70°, C, B

Find $\angle A$

A, 3.2 cm, 47°, B, 3.6 cm, C

THE COSINE LAW

$$c^2 = \_\_ + \_\_ - _____$$

or

When to use:
- Given _____ or _____

Remember that the unknown will either be the first or last variable in the formula!

Find $\angle P$.

P, 26 cm, 18 cm, R, 20 cm, Q

Find d.

D, 18 cm, 58°, 12 cm, E, d, F