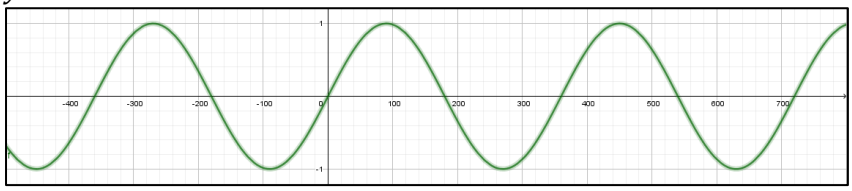
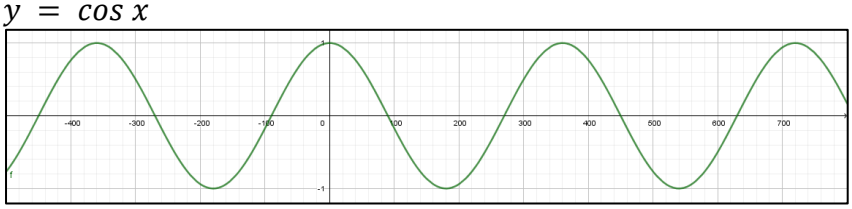
# Solving Trigonometric Equations

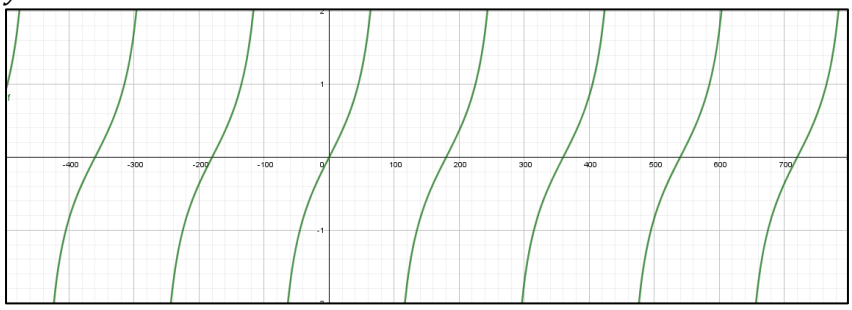
$y = \sin x$



$y = \cos x$



$y = \tan x$



Use these graphs to help you answer the questions below.

Consider:

- Periods
- Rotational symmetry
- Reflective symmetry

Give your answers correct to one decimal place.

| Q | Equation | Domain | Working | Solutions |
|---|---|---|---|---|
| 1 | $\cos x = 1$ | $0° \leq x \leq 360°$ | | |
| 2 | $\sin \theta = -1$ | $0° \leq \theta \leq 360°$ | | |
| 3 | $\tan x = 0$ | $0° \leq x \leq 360°$ | | |
| 4 | $\tan x = 0.2$ | $0° \leq x \leq 720°$ | | |
| 5 | $\cos \theta = 0.6$ | $0° \leq \theta \leq 360°$ | | |
| 6 | $\sin \theta = 0.15$ | $-360° \leq \theta \leq 360°$ | | |
| 7 | $\tan \theta = -0.76$ | $0° \leq \theta \leq 360°$ | | |
| 8 | $\sin x = -0.1$ | $0° \leq x \leq 540°$ | | |
| 9 | $\cos x = -0.43$ | $-180° \leq x \leq 360°$ | | |
| 10 | $\sin \theta = 0.68$ | $0° \leq \theta \leq 720°$ | | |