

a Which graph is $y = (x+1)(x-1)^2$? A a repeated root touches the axis	b $y = 3 \times 2^x$. Find x when $y = 24$ $x = 3$ a coefficient, then backwards	c Solve $\sin x = -0.5$ from 0° to 360° $210^\circ, 330^\circ$ a negative value on the sine graph	d Find the asymptote of $y = 2^x + 3$ $y = 3$ the asymptote of an exponential
e Find its equation $y = (x+3)(x+1)(x-2)$ a cubic's equation from its graph	f $y = a \times b^x$ passes through $(0, 3)$ and $(2, 12)$. Find a and b. $a = 3, b = 2$ an exponential through two points	g Solve $\tan x = -1$ from 0° to 360° $135^\circ, 315^\circ$ a negative tan, both solutions	h Solve $2 \sin x = \sqrt{3}$ from 0° to 360° $60^\circ, 120^\circ$ rearrange, then an exact value
i Find the two asymptotes of $y = \frac{1}{x-2}$ $x = 2, y = 0$ the asymptotes of a moved reciprocal	j Find the cubic with a repeated root at 2, a root at -1 and y intercept 8 $y = 2(x-2)^2(x+1)$ a repeated root and a coefficient	k Find where $y = \sin x$ and $y = \cos x$ meet, from 0° to 360° $45^\circ, 225^\circ$ where sine and cosine meet	l $y = x^3 - 3x$ turns at $(-1, 2)$ and $(1, -2)$. Find k for one solution of $x^3 - 3x = k$ $k < -2$ or $k > 2$ one solution: a range for k

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