

Solution To A Level Induction Example Test

1) a) $4x^2 - 8x + 3$ b) $x^2 - 4x + 4$ c) $-6x^2 + 14x$

2) a) $7x(2x + 3)$ b) $(3y + 7)(3y - 7)$ c) $(x - 4)(x + 9)$ d) $(3t + 2)(2t - 1)$

3) a) $\frac{3x}{4y}$ b) $\frac{6x-7}{12}$

4) a) $h = 7$ b) $x = 0$ or $x = 2.25$ c) $p = -4$ or $p = 3$

5) a) $\frac{1}{2}x^{-3}$ b) $27x^{12}$ c) x^{-7}

6) a) $\frac{1}{32}$ b) 1 c) $\frac{9}{16}$

7) $x = 1, y = 1$

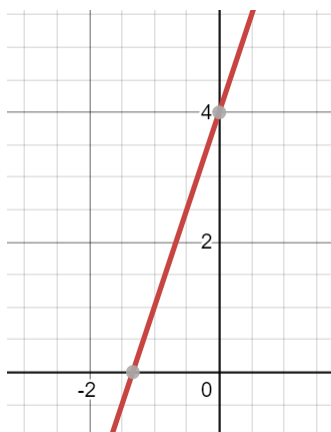
8) a) $x = \frac{s-u^2}{t}$ b) $x = \sqrt{\frac{3}{2\pi}}$ c) $x = \frac{4y+1}{y-2}$

9) $x = \frac{-10 \pm 2\sqrt{15}}{10}$

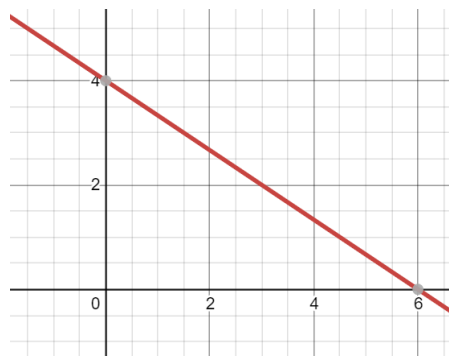
10) (a) $\sqrt{3}$ (b) $15\sqrt{3}$ (c) $8 + 2\sqrt{15}$

11) Correct graph of $y = \sin x$ for $0 \leq x \leq 360^\circ$.

13) a)



b)



c)

