#Jenny

Finally I get this ebook, thanks for all these I can get now!

#Rio

Cool! I'am really happy

#Markus Jensen

I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu

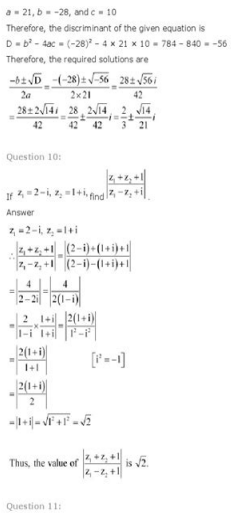
wtf this great ebook for free?!

#Che Salsa

My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler

so many fake sites. this is the first one which worked! Many thanks



$a = 21$, $b = -28$, and $c = 10$

Therefore, the discriminant of the given equation is

$D = b^2 - 4ac = (-28)^2 - 4 \times 21 \times 10 = 784 - 840 = -56$

Therefore, the required solutions are

$$\frac{-b \pm \sqrt{D}}{2a} = \frac{-(-28) \pm \sqrt{-56}}{2 \times 21} = \frac{28 \pm \sqrt{56}i}{42}$$

$$= \frac{28 \pm 2\sqrt{14}i}{42} = \frac{28}{42} \pm \frac{2\sqrt{14}}{42}i = \frac{2}{3} \pm \frac{\sqrt{14}}{21}i$$

Question 10:

If $z_1 = 2 - i$, $z_2 = 1 + i$, find $\left|\frac{z_1 + z_2 + 1}{z_1 - z_2 + 1}\right|$.

Answer

$z_1 = 2 - i$, $z_2 = 1 + i$

$$\therefore \left|\frac{z_1 + z_2 + 1}{z_1 - z_2 + 1}\right| = \left|\frac{(2 - i) + (1 + i) + 1}{(2 - i) - (1 + i) + 1}\right|$$

$$= \left|\frac{4}{2 - 2i}\right| = \left|\frac{4}{2(1 - i)}\right|$$

$$= \left|\frac{2}{1 - i} \times \frac{1 + i}{1 + i}\right| = \left|\frac{2(1 + i)}{1^2 - i^2}\right|$$

$$= \left|\frac{2(1 + i)}{1 + 1}\right| \qquad [i^2 = -1]$$

$$= \left|\frac{2(1 + i)}{2}\right|$$

$$= |1 + i| = \sqrt{1^2 + 1^2} = \sqrt{2}$$

Thus, the value of $\left|\frac{z_1 + z_2 + 1}{z_1 - z_2 + 1}\right|$ is $\sqrt{2}$.

Question 11:

Download PDF version of :

Ncert Maths 11 Complex Number Solution