Must Know Questions To Ace
Real Numbers

1.	Draw a number line to represent each of the following: a) Integers ≥ -5 but < 2 b) Prime numbers > 50 but < 70
2.	Circle the rational numbers in the following: $-\frac{5}{4}$, 3.156 , $\frac{\sqrt{7}}{\sqrt{4}}$, π , $\sqrt[3]{-8}$, 0 , $0.\dot{2}\dot{5}$
3.	Evaluate each of the following without the use of a calculator. a) $-15-[-5+(-7+4)]$ b) $[-7+(-2)]-[-13-(-7)]+5$
4.	Evaluate each of the following without the use of a calculator. a) $180 \div \sqrt[3]{-27} - 25 \div (-5)$ b) $[(-3)^2-(-2)^3] \times (-3)$
5.	Look at the numbers below: $0.\dot{5}\dot{4}$, $-\pi$, $\sqrt{2}$, -7^2 , 1 , $\sqrt[3]{27}$ a) Arrange all the numbers in descending order. b) Write down i) The prime numbers ii) The irrational numbers

6.	Express the following rational numbers as recurring decimals. a) $\frac{3}{22}$ b) $\frac{7}{27}$
7.	The temperature in Shanghai at 5 a.m was $-6°C$. The temperature at 11 a.m was $12°C$. a) Find the difference between these two temperatures. b) Assuming that the temperature rises at a steady rate, find i) The temperature at 9 a.m ii) The time when the temperature was $10.5°C$.

Answer Key:

2. $-\frac{5}{4}$, 3.156 , $\sqrt[3]{-8}$, 0, $0.\dot{2}\dot{5}$

3. a) -7

   b) 2

4. a) -55

   b) -51

5. a) $\sqrt[3]{27}$, $\sqrt{2}$, 1 , $0.\dot{5}\dot{4}$, $-\pi$, -7^2

   bi) $\sqrt[3]{27}$

   bii) $\sqrt{2}$, $-\pi$

6. a) $0.1\dot{3}\dot{6}$

   b) $0.\dot{2}5\dot{9}$

7. a) $18°C$

   bi) $6°C$

   bii) 10.30 a.m