

June 2021

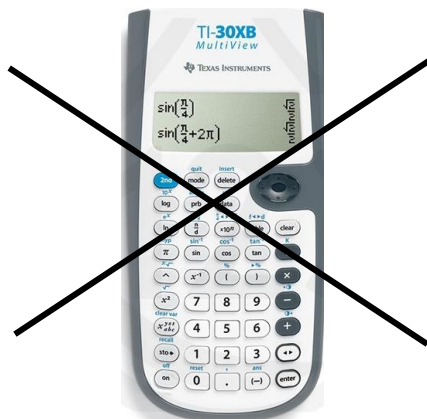
European School Brussels III

PART A: WITHOUT CALCULATOR

DATE: 11 June 2021

Duration of the exam: 1 period (45 min.)

Materials: Without calculator



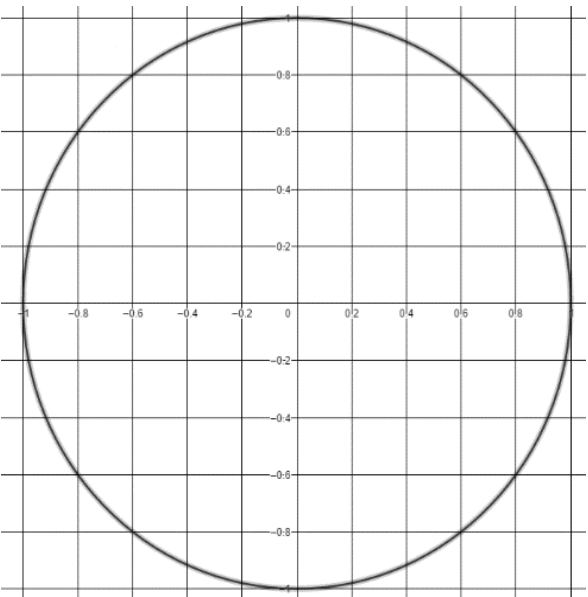
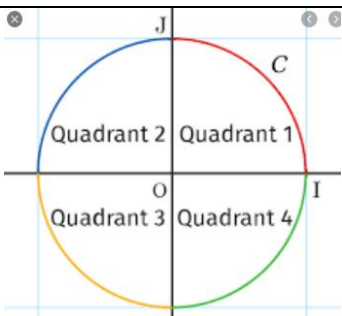
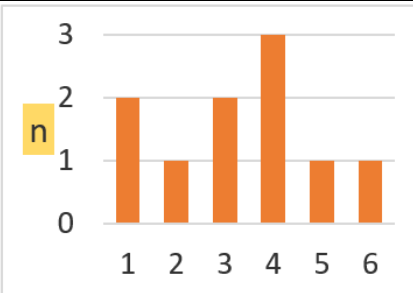
S5MA4ENA

/25

Surname:

Name:

- Clearly number your answers on your answer sheets
- Write down all intermediate steps in the calculations.
- Take time to read and review everything after solving all questions.

Question A1	/4
<p>Find the value of $\cos \frac{7\pi}{4}$ using the unit circle below.</p> 	
Question A2	/4
<p>True or false? Justify your answer. If $\sin(\alpha) > 0$ and α is in Quadrant 2, $\tan(\alpha) > 0$.</p>	
Question A3	/6
<p>Let A and B be two events such that: $P(A) = 0.4$; $P(B') = 0.3$ and $P(A \cup B) = 0.8$. Calculate $P(A/B)$.</p>	
Question A4	/6
<p>50% of a hotel rooms have a fireplace, 20% have a radiator and 10% have a fireplace and a radiator. We randomly choose a hotel room. What is the probability of the room we have chosen to have only a fireplace?</p>	
Question A5	/5
<p>A dice is thrown 10 times. The diagram above shows the absolute frequency n of the 6 possible results.</p>  <p>Based on the diagram above determine the mean and the median.</p>	