

Week 2: Unlock the Padlocks Answers 13 04 2020

<p style="text-align: center;">Padlock 1 : a 2 digit code</p> <ul style="list-style-type: none"> • The number is even • It is divisible by 10 • The tens digit is the sum of 2 and 3 <p>Answer: 50</p>	<p style="text-align: center;">Padlock 4: a 4 digit code</p> <ul style="list-style-type: none"> • The tens digit is less than 5, even and greater than 1. • The total of all the digits is 15. • The hundreds digit is 1. • The thousands digit is 2 less than the tens digit. • The number is smaller than 3000. <p>Answer: 2148</p>
<p style="text-align: center;">Padlock 2 : a 2 digit code</p> <ul style="list-style-type: none"> • The number is odd. • It is greater than 33 but less than 40. • The difference between the 2 digits is 4. <p>Answer: 37</p>	<p style="text-align: center;">Padlock 5: a 5 digit code</p> <ul style="list-style-type: none"> • The code is a palindrome. • The hundreds digit is the answer to $27 \div 9$. • The Hundred thousands digit is 1 more than the thousands digit. • 0 is not used in this number. • The total of all the digits is 3^2. <p>Answer: 21312</p>
<p style="text-align: center;">Padlock 3: a 3 digit code</p> <ul style="list-style-type: none"> • The total of the digits add to 10. • The product of the hundreds and ones digit is 15. • The hundreds digit is the largest of the three digits. <p>Answer: 523</p>	<p style="text-align: center;">Padlock 6: a 6 digit code</p> <ul style="list-style-type: none"> • The hundreds digit is prime as is the hundred thousands digit. • It is more than 400 000 but less than 500 000. • The digits of the code are consecutive numbers. <p>Answer: 456789</p>

