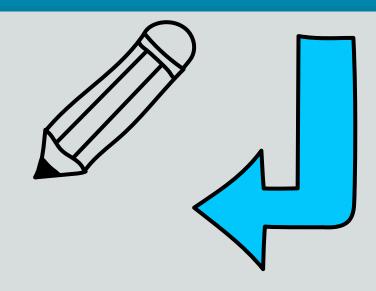
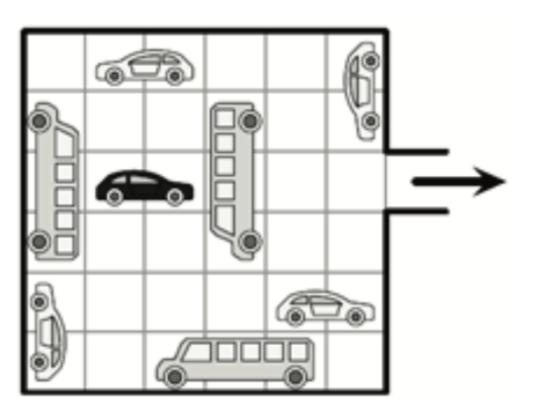
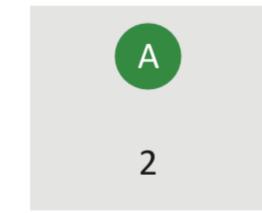


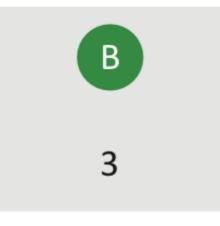
٧. تتحــرك المركبــات فـــي الموقــف (الموضــح بالشــكل التالـــي) للأمــام والخلــف فقــط ولا يمكنهــا الانعطــاف. مــا أقــل عــدد مــن المركبــات يجــب أن تتحــرك لتفســح الطريــق لخــروج الســـيارة الســوداء مــن الموقــف؟



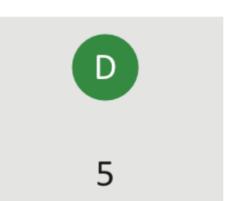


7. In the garage shown in the picture, vehicles can only move forward or backward but cannot turn. What is the smallest number of vehicles that have to move for the black car to be able to exit the garage?

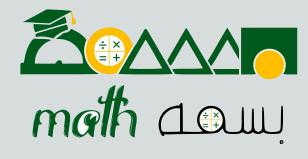




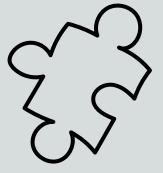




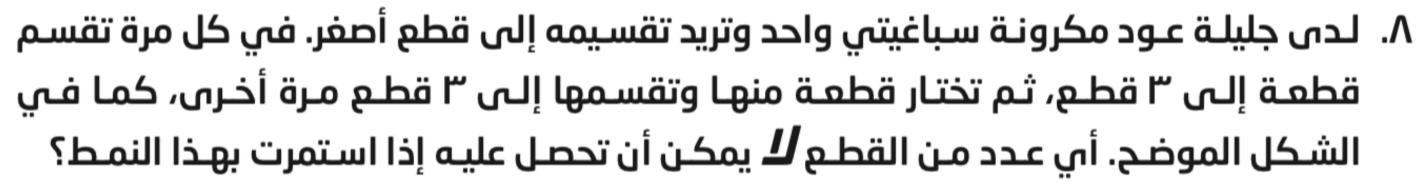


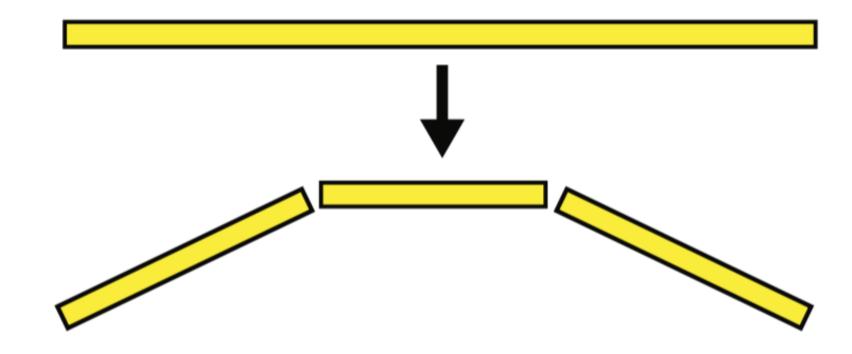




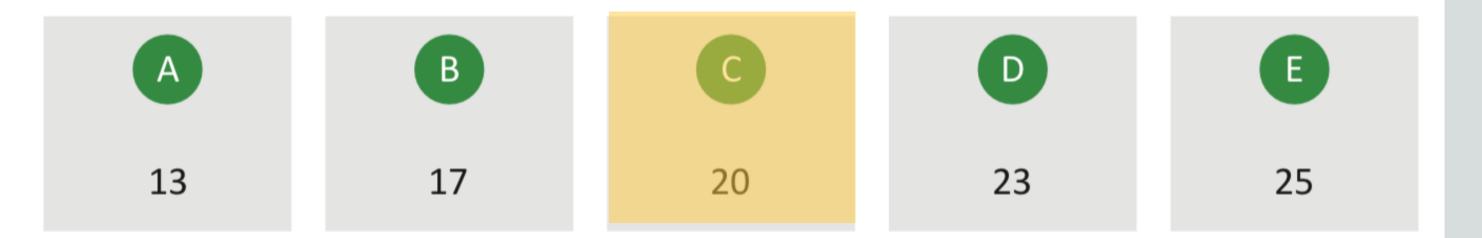


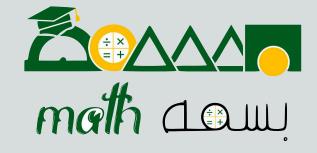


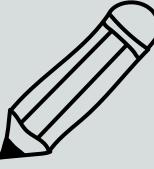




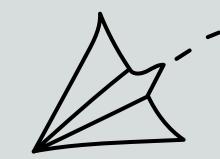
8. Jalila has one long string of spaghetti she needs to make smaller. Every time she breaks one piece of spaghetti, it becomes three pieces as shown in the picture. Which of the following numbers of pieces could she *not* get?











٩. رتب بدر البطاقات الموضحة في الشكل التالي ليحصل على أصغر عدد ممكن مكون من ١٢
 منزلة. ما هي أرقام أول ثلاثة منازل في هذا العدد من اليمين؟

9. Badr rearranges the 7 pieces shown to get the smallest possible 12 digit number. What are the last 3 digits of this number?

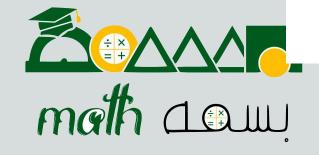


В

C

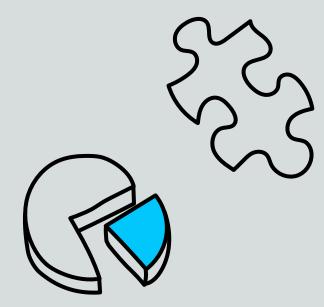
D

E

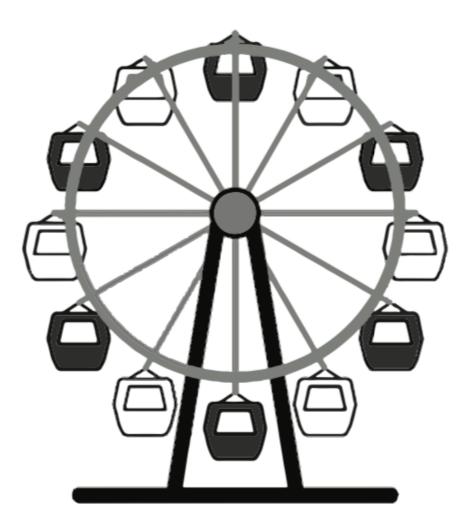








١٠. يوضح الشكل التالي العجلة الدوارة في وضع ابتدائي. إذا بدأت العجلة في الدوران، بعد أي كسر من دورة كاملة للعجلة ستكون مركبة بيضاء في أعلى العجلة؟



10. Which of the following fractions of a whole turn should the Ferris wheel turn to bring a white pod to the top?



В



D

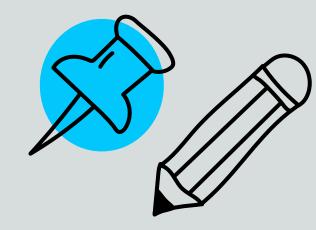
E

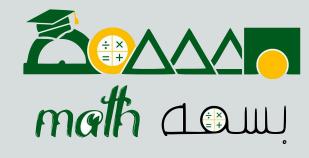
 $\frac{1}{2}$

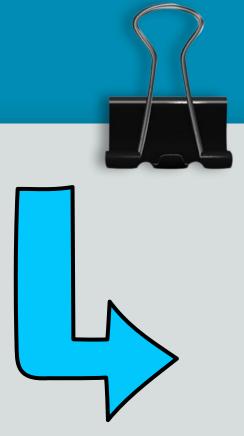
 $\frac{1}{3}$

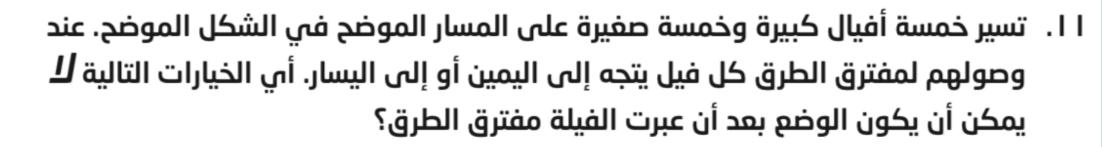
 $\frac{1}{6}$

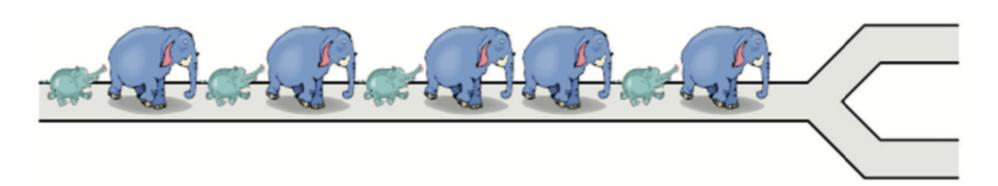
<u>1</u> 12 6



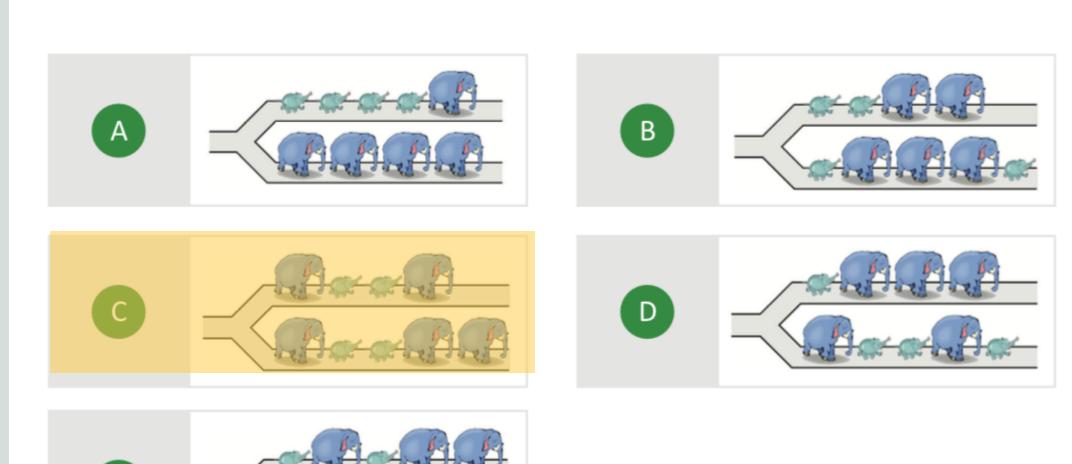




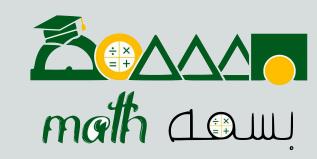




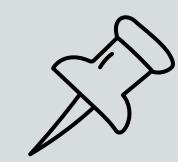
11. Five big elephants and four small ones are walking along a path, as shown.
When they reach the junction, each elephant turns either to the left or to the right. Which of the following *Cannot* be the situation after they all pass the junction?



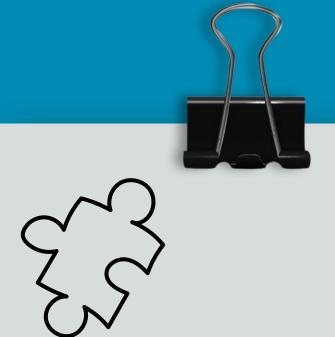




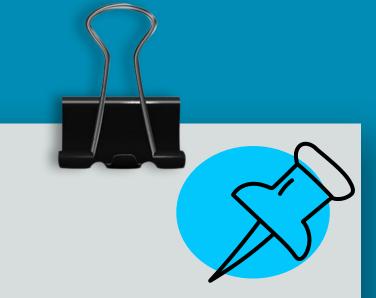


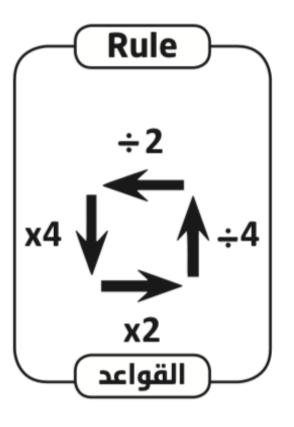


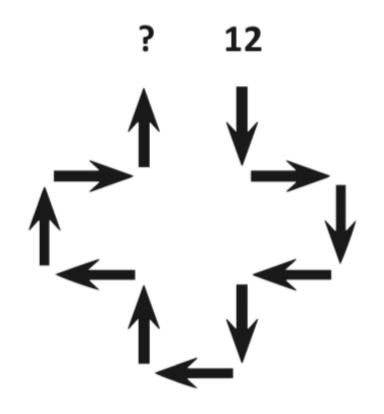




۱۲. بدأت يارا بالعدد ۱۲ وتبعت الأسهم مستخدمة القواعد الموضحة في الشكل التالي على اليسار. ما العدد الذي ستحصل عليه يارا في النهاية؟







12. Yara starts with 12 and follows the arrows using the rules shown in the picture on the left. What number will she finish with?

