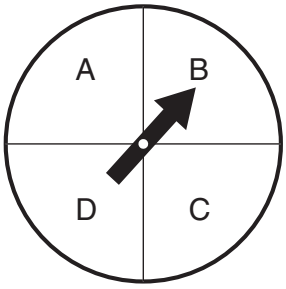
NAME _____ DATE _____ PERIOD _____

Lesson 7 Skills Practice

Independent and Dependent Events

For Exercises 1–6, a number cube is rolled and the spinner at the right is spun. Find each probability.



1. P(1 and A) 1/6 x 1/4 = 1/24

2. P(odd and B) 1/2 x 1/4 =1/8

3. P(prime and D) 2/3 x 1/6= 2/18=1/9

4. P(greater than 4 and C) 1/3 x 1/4 = 1/12

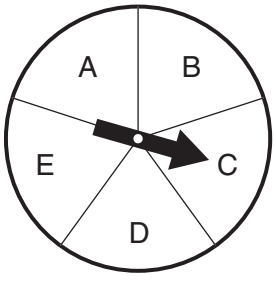
5. P(less than 3 and consonant) 2/6 x 1/3 =3/12 =1/4

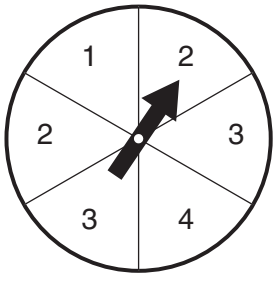
6. P(prime and consonant) 2/3 x 3/4 =6/12 = 1/2

7. What is the probability of spinning the spinner above 3 times and getting a vowel each time? 1/4 x 1/4 x 1/4 1/4 to the 3 power =1/64

8. What is the probability of rolling a number cube 3 times and getting a number less than 3 each time? 1/3 x 1/3 x 1/3 x 1/3 = 1/27

Each spinner at the right is spun. Find each probability.





9. P(A and 2) 1/5 x 1/3 =1/15

10. P(vowel and even) 2/5 x 1/3 = 1/15

11. P(consonant and 1) 3/5 x 1/6 =3/30 = 1/20

12. P(D and greater than 1) 1/5 x 2/5 = 2/10 =1/6

There are 3 red, 1 blue, and 2 yellow marbles in a bag. Once a marble is selected, it is not replaced. Find each probability.

13. P(red and then yellow) 1/2 x 2/5 = 2/10 = 1/5

14. P(blue and then yellow) 1/6 x 2/5 = 2/30= 1/15

15. P(red and then blue) 1/2 x 1/5 = 1/10

16. P(two yellow marbles) 1/3 x 1/5 =1/15

17. P(two red marbles in a row) 3/6 = 1/2 x 2/5 = 2/10 = 1/5

18. P(three red marbles) 3/6 =1/2 x 2/5 x 1/4 =2/40 =1/20

GAMES There are 13 yellow cards, 6 blue, 10 red, and 8 green cards in a stack of cards turned face down. Once a card is selected, it is not replaced. Find each probability.

19. P(2 blue cards) 1/6 x 1/7 = 1/42

20. P(2 red cards) 10/36 x 1/35 = 10 /1260

21. P(a yellow card and then a green card) 13/36 x 8 /35 =105/1260

22. P(a blue card and then a red card)

23. P(two cards that are *not* red) 26/36 = 13/18 x 5/7 = 65/126

24. P(two cards that are neither red or green)