Do Now

What is the probability of spinning the spinner below twice and having it land on blue then red?

What is the probability of spinning the spinner below twice and having land on a prime number then the GCF of 8 and 20?

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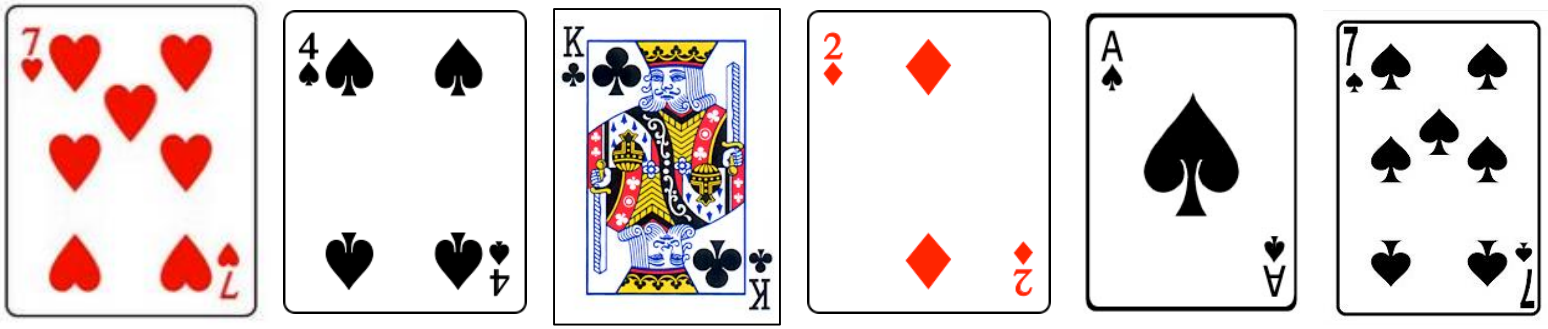
Drawing cards

I have the following cards:



What is the probability of drawing a red card, placing it back in the cards, and then drawing a red card again?

P(red, red) = ?

Are these events independent or dependent?

Drawing cards

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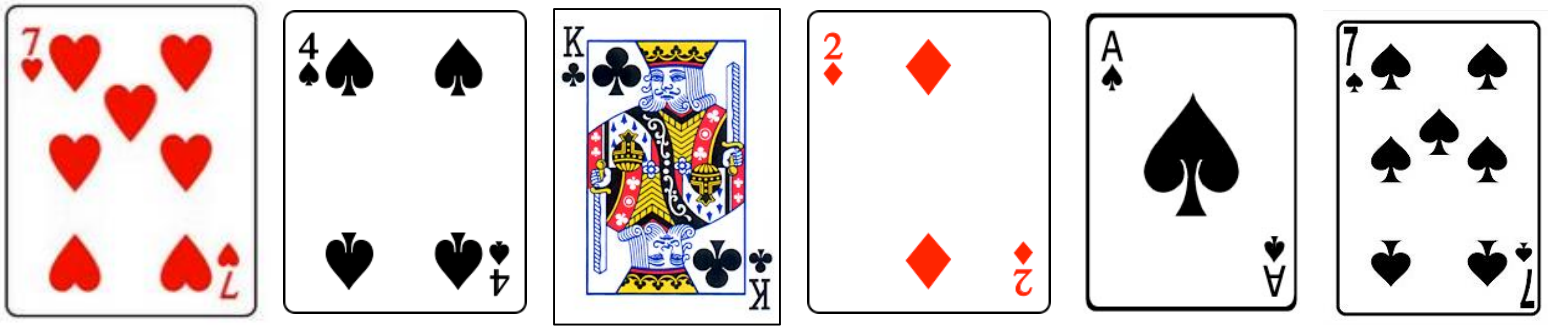


What is the probability of drawing a red card, not replacing it back in the cards, and then drawing a red card again?

P(red, red after red)

Are these events independent or dependent?

Puzzle Practice: We will practice calculating the probability of dependent events using this puzzle.

What do you get if a bunch of bad guys fall in the ocean?

Cross out the box containing each correct answer. (If an answer appears more than once, it doesn't matter which one you cross out.) When you finish, write the letters from the remaining boxes in the spaces at the bottom of the page.

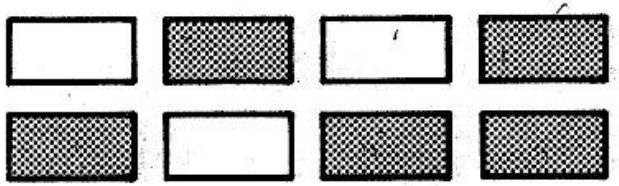
I. Find each probability if you pick a card, do *not* replace it, then pick a second card.

(1) P(black, then white)

(2) P(black, then black)

(3) P(white, then black)

(4) P(white, then white)



TH 0	AN $\frac{1}{3}$	IT $\frac{1}{5}$	IT $\frac{1}{5}$	IT $\frac{1}{5}$	PL $\frac{1}{6}$	AC $\frac{1}{8}$	ES $\frac{1}{9}$	EY $\frac{1}{10}$	EY $\frac{1}{10}$	ON $\frac{1}{12}$	ON $\frac{1}{12}$	RI $\frac{1}{14}$	DE $\frac{1}{15}$
DE $\frac{1}{15}$	DE $\frac{1}{15}$	SO $\frac{1}{36}$	ME $\frac{2}{5}$	ET $\frac{3}{28}$	WA $\frac{4}{9}$	TE $\frac{5}{12}$	AM $\frac{5}{14}$	LL $\frac{5}{18}$	RS $\frac{7}{15}$	VE $\frac{7}{18}$	RY $\frac{7}{36}$	ST $\frac{15}{56}$	ST $\frac{15}{56}$

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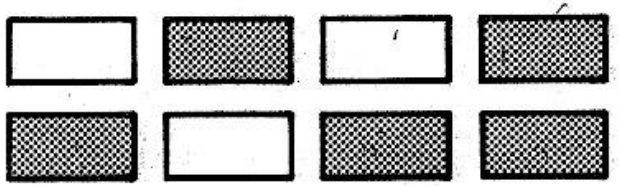

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Puzzle Practice: We will practice calculating the probability of dependent events using this puzzle.

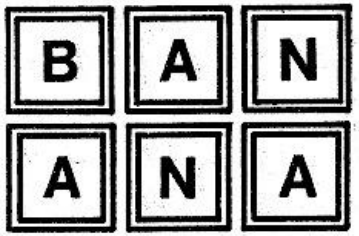
What do you get if a bunch of bad guys fall in the ocean?

II. Each letter of the word *BANANA* is written on a card. Find each probability if you pick two cards without replacing the first.

(5) P(B, then N) (6) P(B, then A) (7) P(N, then B)

(8) P(N, then A) (9) P(A, then B) (10) P(A, then N)

(11) P(N, then N) (12) P(A, then A) (13) P(B, then B)



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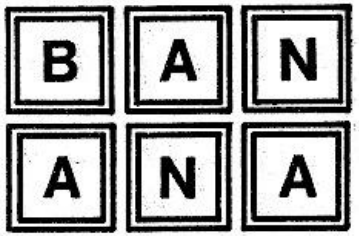

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Puzzle Practice: We will practice calculating the probability of dependent events using this puzzle.

What do you get if a bunch of bad guys fall in the ocean?

III. Find each probability if you pick a marble, do not replace it, then pick a second marble.
(R = red; B = blue; G = green)

(14) P(blue, then green)

(15) P(green, then red)

(16) P(green, then green)

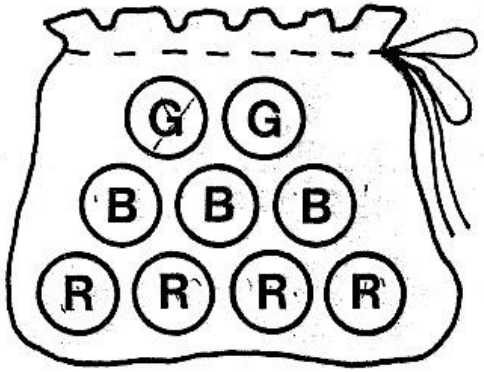
(17) P(green, then not green)

(18) P(red, then blue)

(19) P(red, then not blue)

(20) P(blue, then blue)

(21) P(not blue, then not blue)



TH	AN	IT	IT	IT	PL	AC	ES	EY	EY	ON	ON	RI	DE
0	$\frac{1}{3}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{14}$	$\frac{1}{15}$
DE	DE	SO	ME	ET	WA	TE	AM	LL	RS	VE	RY	ST	ST
$\frac{1}{15}$	$\frac{1}{15}$	$\frac{1}{36}$	$\frac{2}{5}$	$\frac{3}{28}$	$\frac{4}{9}$	$\frac{5}{12}$	$\frac{5}{14}$	$\frac{5}{18}$	$\frac{7}{15}$	$\frac{7}{18}$	$\frac{7}{36}$	$\frac{15}{56}$	$\frac{15}{56}$

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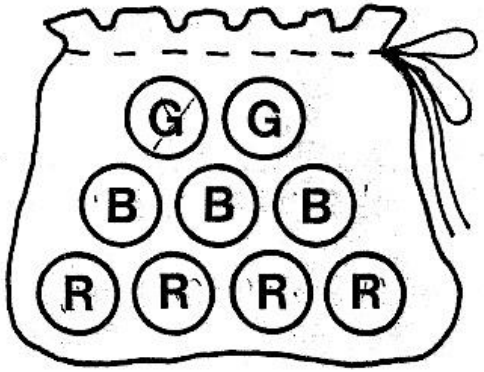

TH	AN	IT	IT	IT	PL	AC	ES	EY	EY	ON	ON	RI	DE
0	$\frac{1}{3}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{14}$	$\frac{1}{15}$
DE	DE	SO	ME	ET	WA	TE	AM	LL	RS	VE	RY	ST	ST
$\frac{1}{15}$	$\frac{1}{15}$	$\frac{1}{36}$	$\frac{2}{5}$	$\frac{3}{28}$	$\frac{4}{9}$	$\frac{5}{12}$	$\frac{5}{14}$	$\frac{5}{18}$	$\frac{7}{15}$	$\frac{7}{18}$	$\frac{7}{36}$	$\frac{15}{56}$	$\frac{15}{56}$

IV. Solve.

(22) There were 6 purple socks and 4 orange socks in a drawer. Zucky picked one sock without looking and then another without looking (or replacing the first). What is the probability that he picked 2 purple socks?

(23) There are 10 boxes in a grab bag. The boxes are identical except that 7 of them contain $20 bills. A contest winner gets to pick two boxes from the grab bag. What is the probability of getting two $20 bills?

TH	AN	IT	IT	IT	PL	AC	ES	EY	EY	ON	ON	RI	DE
0	$\frac{1}{3}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{6}$	$\frac{1}{8}$	$\frac{1}{9}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{14}$	$\frac{1}{15}$
DE	DE	SO	ME	ET	WA	TE	AM	LL	RS	VE	RY	ST	ST
$\frac{1}{15}$	$\frac{1}{15}$	$\frac{1}{36}$	$\frac{2}{5}$	$\frac{3}{28}$	$\frac{4}{9}$	$\frac{5}{12}$	$\frac{5}{14}$	$\frac{5}{18}$	$\frac{7}{15}$	$\frac{7}{18}$	$\frac{7}{36}$	$\frac{15}{56}$	$\frac{15}{56}$