

Probability: Starters

Starter 1 (1 of 3)

ułamek najprostsza postać

1. Write 0.25 as a **fraction** in its **simplest form** .

ułamek dziesiętny procent

2. Write $\frac{3}{5}$ as a **decimal** and as a **percentage**.

prawdopodobieństwo

3. Every **probability** is a number from ___ to ___.

Starter 1 (1 of 3)

ułamek najprostsza postać

1. Write 0.25 as a fraction in its simplest form . $\frac{1}{4}$

ułamek dziesiętny procent

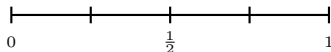
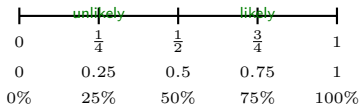
2. Write $\frac{3}{5}$ as a decimal and as a percentage. $0.6 = 60\%$

prawdopodobieństwo

3. Every probability is a number from 0 to 1.

Starter 1 (2 of 3)

niemożliwy szanse pewny
mało prawdopodobne prawdopodobne



uczciwy

A a fair coin lands on heads
losowy

B a day chosen at random is a Saturday

C an ordinary dice is rolled and shows a number less than 7

D a counter taken from a bag of 3 red and 1 blue

zdarzenie

1. Mark events **A, B, C** and **D** on the empty scale.

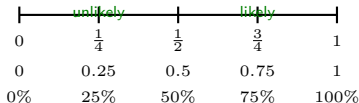
skalować

2. Complete the table.

Description	prawdopodobne Probability
niemożliwy impossible	0
mało prawdopodobne unlikely	between 0 and
równe szanse even chance	—
prawdopodobne likely	between —
pewny certain	—

Starter 1 (2 of 3)

niemożliwy szanse pewny
mało prawdopodobne prawdopodobne



uczciwy

A a fair coin lands on heads
losowy

B a day chosen at random is a Saturday

C an ordinary dice is rolled and shows a number less than 7

D a counter taken from a bag of 3 red and 1 blue

zdarzenie

1. Mark events **A, B, C** and **D** on the empty scale.

2. Complete the table.

Description	prawdopodobne Probability
niemożliwy impossible	0
mało prawdopodobne unlikely	between 0 and 0.5
równe szanse even chance	0.5
prawdopodobne likely	between 0.5 and 1
pewny certain	1

Starter 1 (3 of 3)

prawdopodobieństwo

mało prawdopodobne

1. Write a **probability** that is **unlikely** but not **niemożliwy** **ułamek** **ułamek dziesiętny** **procent**
impossible , as a **fraction** , a **decimal** and a **percentage**.

prawdopodobieństwo

2. Ravi says “the **probability** that it rains tomorrow is 1.4”. Explain why he is wrong.

Starter 1 (3 of 3)

prawdopodobieństwo

mało prawdopodobne

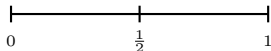
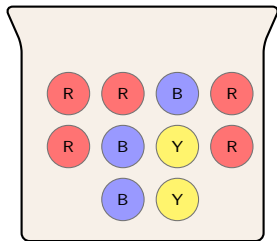
1. Write a **probability** that is **unlikely** but not **niemożliwy** **ułamek** **ułamek dziesiętny** **procent**
impossible , as a **fraction** , a **decimal** and a **percentage**.

Between 0 and 0.5, such as $\frac{1}{10} = 0.1 = 10\%$.

prawdopodobieństwo

2. Ravi says “the **probability** that it rains tomorrow is 1.4”. Explain **prawdopodobieństwo**
why he is wrong. **No** **probability** **is greater than 1; a**
prawdopodobieństwo **pewny**
probability **of 1 means certain** .

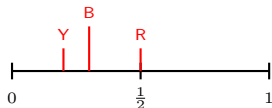
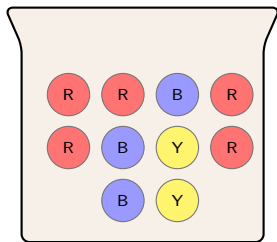
Starter 2 (1 of 3)



One counter is taken from the bag
losowy
at random. The
prawdopodobieństwo
probability that

- ułamek dziesiętny
1. Write $\frac{1}{2}$ as a decimal and as a
percent
percentage.
ułamek
2. Write 30% as a fraction in its
najprostsza postać
simplest form .
3. How many counters are in the bag altogether?

Starter 2 (1 of 3)



One counter is taken from the bag
losowy
at random. The
prawdopodobieństwo
probability that

ułamek dziesiętny

1. Write $\frac{1}{2}$ as a decimal and as a percent

percentage. $0.5 = 50\%$

ułamek

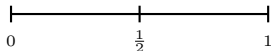
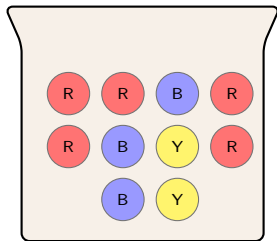
2. Write 30% as a fraction in its simplest form

$$\frac{30}{100} = \frac{3}{10}$$

3. How many counters are in the bag altogether?

10

Starter 2 (2 of 3)



One counter is taken from the bag
losowy
at random. The
prawdopodobieństwo
probability that

ułamek

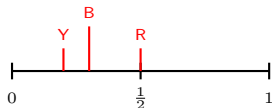
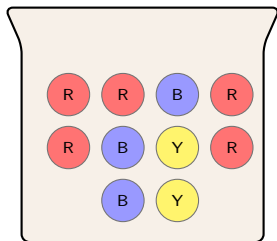
1. Write $P(\text{red})$ as a fraction in its
najprostsza postać
simplest form .

ułamek

2. Write $P(\text{blue})$ as a fraction , a
ułamek dziesiętny procent
decimal and a percentage.

3. Mark $P(\text{red})$, $P(\text{blue})$ and $P(\text{yellow})$ on the
prawdopodobieństwo skalować
probability scale .

Starter 2 (2 of 3)



One counter is taken from the bag
losowy
at random. The
prawdopodobieństwo
probability that

ułamek

1. Write $P(\text{red})$ as a fraction in its
najprostsza postać

simplest form . $\frac{5}{10} = \frac{1}{2}$

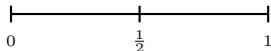
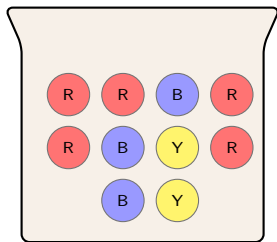
ułamek

2. Write $P(\text{blue})$ as a fraction, a
ułamek dziesiętny procent
decimal and a percentage.

$$\frac{3}{10} = 0.3 = 30\%$$

3. Mark $P(\text{red})$, $P(\text{blue})$ and $P(\text{yellow})$ on the
prawdopodobieństwo skalować
probability scale .

Starter 2 (3 of 3)



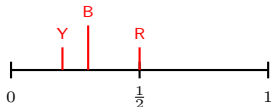
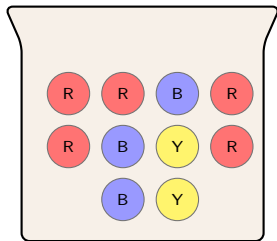
One counter is taken from the bag

at random. The probability that

ułamek

1. Write $P(\text{not red})$ as a fraction in its simplest form .
2. What does $P(\text{red}) + P(\text{blue}) + P(\text{yellow})$ come to, and why?
3. Only red counters are added to the bag, until $P(\text{red})$ is $\frac{3}{4}$. How many red counters are added?

Starter 2 (3 of 3)



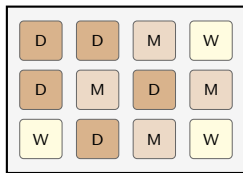
One counter is taken from the bag

losowy
at random. The
prawdopodobieństwo
probability that

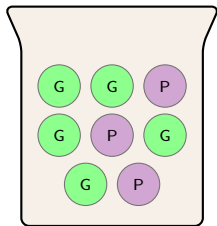
ułamek

1. Write $P(\text{not red})$ as a fraction in its najprostsza postać simplest form . $\frac{5}{10} = \frac{1}{2}$
2. What does $P(\text{red}) + P(\text{blue}) + P(\text{yellow})$ come to, and why? 1; the counter is certain to be one of the three colours.
3. Only red counters are added to the bag, until $P(\text{red})$ is $\frac{3}{4}$. How many red counters are added? 10, giving 15 red counters out of 20, and $\frac{15}{20} = \frac{3}{4}$.

Starter 3 (1 of 3)



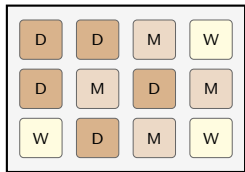
a box of dark, milk and white chocolates



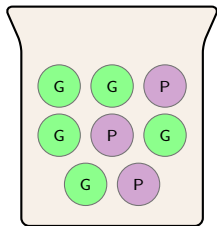
a bag of green and purple counters

- Write $\frac{3}{4}$ as a **decimal** and as a **percent** **procent** **ułamek dziesiętny** **percentage**.
- Write 0.08 as a **percentage** **procent** and as a **fraction** **ułamek** in its **najprostsza postać** **simplest form**.
- One chocolate is taken at **random** **losowy**. Write **najprostsza postać** $P(\text{white})$ in its **simplest form**.

Starter 3 (1 of 3)



a box of dark, milk and white chocolates



a bag of green and purple counters

ułamek dziesiętny

1. Write $\frac{3}{4}$ as a decimal and as a percent

percentage. $0.75 = 75\%$

procent

ułamek

2. Write 0.08 as a percentage and as a fraction in its simplest form

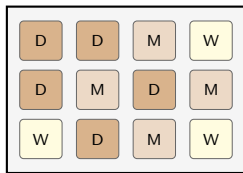
$8\% = \frac{8}{100} = \frac{2}{25}$

losowy

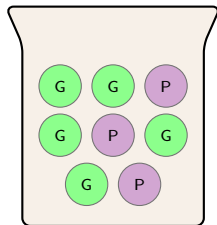
3. One chocolate is taken at random. Write $P(\text{white})$ in its simplest form

$\frac{3}{12} = \frac{1}{4}$

Starter 3 (2 of 3)



a box of dark, milk and white chocolates



a bag of green and purple counters

najprostsza postać

1. Write $P(\text{not milk})$ in its simplest form .

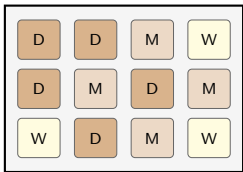
ułamek

2. Write $P(\text{green})$ for the bag as a fraction , a
ułamek dziesiętny procent
decimal and a percentage.

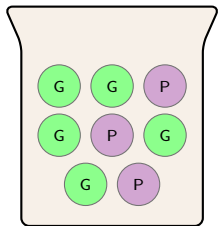
prawdopodobne

3. Which is more likely : a dark
chocolate, or a purple counter? Show your working.

Starter 3 (2 of 3)



a box of dark, milk and white chocolates



a bag of green and purple counters

najprostsza postać

1. Write $P(\text{not milk})$ in its simplest form .

$$\frac{8}{12} = \frac{2}{3}$$

ułamek

2. Write $P(\text{green})$ for the bag as a fraction , a decimal and a percentage.

$$\frac{5}{8} = 0.625 = 62.5\%$$

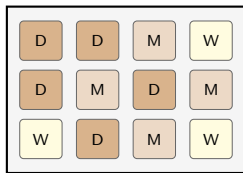
prawdopodobne

3. Which is more likely : a dark

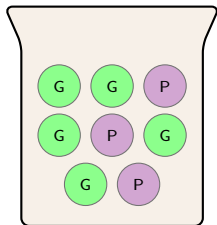
chocolate, or a purple counter? Show your working.

$$\frac{5}{12} = \frac{10}{24} \text{ and } \frac{3}{8} = \frac{9}{24}, \text{ so the dark chocolate.}$$

Starter 3 (3 of 3)



a box of dark, milk and white chocolates



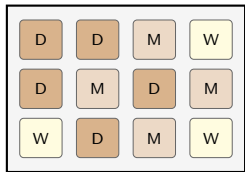
a bag of green and purple counters

losowy

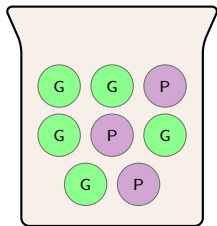
1. A counter is taken from the bag at **random** and then replaced. This is done 200 times. How many **oczekiwać** green counters would you **expect** ?

2. Another bag holds only red and blue counters. It holds 12 red counters, and $P(\text{red}) = 0.4$. How many counters are in it?

Starter 3 (3 of 3)



a box of dark, milk and white chocolates



a bag of green and purple counters

losowy

1. A counter is taken from the bag at random and then replaced. This is done 200 times. How many green counters would you oczekiwać expect ?

$$\frac{5}{8} \times 200 = 125$$

2. Another bag holds only red and blue counters. It holds 12 red counters, and $P(\text{red}) = 0.4$. How many counters are in it? $12 \div 0.4 = 30$

Starter 4 (1 of 3)

1. Write $\frac{2}{5}$ as a $\frac{\text{ułamek dziesiętny}}{\text{decimal}}$ and as a $\frac{\text{procent}}{\text{percentage}}$.
2. Write 65% as a $\frac{\text{ułamek}}{\text{fraction}}$ in its $\frac{\text{najprostsza postać}}{\text{simplest form}}$.
3. A spinner lands on red, blue or green only. $P(\text{red}) = 0.35$, $P(\text{blue}) = 0.4$. Write $P(\text{green})$.

Starter 4 (1 of 3)

1. Write $\frac{2}{5}$ as a $\frac{\text{ułamek dziesiętny}}{\text{decimal}}$ and as a $\frac{\text{procent}}{\text{percentage}}$. $0.4 = 40\%$
2. Write 65% as a $\frac{\text{ułamek}}{\text{fraction}}$ in its $\frac{\text{najprostsza postać}}{\text{simplest form}}$. $\frac{65}{100} = \frac{13}{20}$
3. A spinner lands on red, blue or green only. $P(\text{red}) = 0.35$, $P(\text{blue}) = 0.4$. Write $P(\text{green})$. $1 - 0.35 - 0.4 = 0.25$

Starter 4 (2 of 3)

Choose a sandwich



C cheese H ham T tuna

and a drink



W water J juice

	W	J
C		
H		
T		

1. Complete the table to list every lunch deal.
2. How many different lunch deals are there?
losowy
3. A deal is chosen at random . Write $P(\text{juice})$ in its
najprostsza postać
simplest form .

Starter 4 (2 of 3)

Choose a sandwich



C cheese H ham T tuna

and a drink



W water J juice

	W	J
C	CW	CJ
H	HW	HJ
T	TW	TJ

1. Complete the table to list every lunch deal.
2. How many different lunch deals are there? 6
losowy
3. A deal is chosen at random. Write $P(\text{juice})$ in its
najprostsza postać
simplest form . $\frac{3}{6} = \frac{1}{2}$

Starter 4 (3 of 3)

Choose a sandwich



C cheese H ham T tuna

and a drink



W water J juice

	W	J
C		
H		
T		

1. Write $P(\text{cheese with water})$.
2. A third drink is added. How many deals are there now?
uczciwy wynik
3. Two fair coins are flipped. List all the outcomes systematically, then write $P(\text{one head and one tail})$.

Starter 4 (3 of 3)

Choose a sandwich



C cheese H ham T tuna

and a drink



W water J juice

	W	J
C	CW	CJ
H	HW	HJ
T	TW	TJ

1. Write $P(\text{cheese with water})$. $\frac{1}{6}$

2. A third drink is added. How many deals are there

now? $3 \times 3 = 9$

uczciwy

wynik

3. Two fair coins are flipped. List all the outcomes

systematically, then write $P(\text{one head and one tail})$.

HH, HT, TH, TT, so $\frac{2}{4} = \frac{1}{2}$

Starter 5 (1 of 3)

uczciwy

Two fair, ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	
	2	3	4	5	6	7	
	3	4	5	6	7	8	
	4	5	6	7	8	9	
	5	6	7	8	9	10	
	6						

suma

the sum of the two dice

ułamek dziesiętny

1. Write $\frac{1}{3}$ as a decimal and as a percent percentage.

ułamek

2. Write 0.36 as a fraction in its simplest form.

suma

3. Write the missing sum s in the table.

Starter 5 (1 of 3)

uczciwy

Two fair , ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	4	5	6	7	8	9	10
	5	6	7	8	9	10	11
	6	7	8	9	10	11	12
		suma					

the sum of the two dice

ułamek dziesiętny

- Write $\frac{1}{3}$ as a decimal and as a percent.
percentage. $0.\dot{3} = 33.\dot{3}\%$
ułamek

- Write 0.36 as a fraction in its simplest form.
najprostsza postać
suma . $\frac{36}{100} = \frac{9}{25}$

- Write the missing sum s in the table.

Starter 5 (2 of 3)

uczciwy

Two fair, ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	
	2	3	4	5	6	7	
	3	4	5	6	7	8	
	4	5	6	7	8	9	
	5	6	7	8	9	10	
	6						

suma

the sum of the two dice

wynik

1. How many outcomes are there altogether?

2. Write $P(\text{the sum is } 7)$ in its simplest form.

prawdopodobieństwo

3. Write the probability that the sum

is more than 10, in its simplest form.

sum

Starter 5 (2 of 3)

uczciwy

Two fair, ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	4	5	6	7	8	9	10
	5	6	7	8	9	10	11
	6	7	8	9	10	11	12
		suma					

the sum of the two dice

wynik

1. How many outcomes are there altogether?

$$6 \times 6 = 36$$

2. Write $P(\text{the sum is 7})$ in its najprostsza postać

simplest form $\cdot \frac{6}{36} = \frac{1}{6}$

prawdopodobieństwo

3. Write the probability that the suma

sum is more than 10, in its najprostsza postać

simplest form $\cdot \frac{3}{36} = \frac{1}{12}$

Starter 5 (3 of 3)

uczciwy

Two **fair**, ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	
	2	3	4	5	6	7	
	3	4	5	6	7	8	
	4	5	6	7	8	9	
	5	6	7	8	9	10	
	6						

suma

the **sum** of the two dice

suma prawdopodobne

1. Which **sum** is the most **likely** ?
prawdopodobieństwo procent

Use its **probability** as a **percentage**
suma

to decide whether that **sum** is
prawdopodobne

likely or
mało prawdopodobne
unlikely .

2. The two dice are rolled 180 times. How many
oczekiwać **suma**

times would you **expect** a **sum** of 5?

Starter 5 (3 of 3)

uczciwy

Two fair, ordinary dice are rolled, and the two numbers on them are added together.

		second dice					
first dice	+	1	2	3	4	5	6
	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	4	5	6	7	8	9	10
	5	6	7	8	9	10	11
	6	7	8	9	10	11	12

suma

the sum of the two dice

1. Which sum is the most likely?
 Use its probability as a percentage to decide whether that sum is

prawdopodobne

likely or mało prawdopodobne

unlikely. 7 is the most prawdopodobne sum
 likely sum, but $\frac{1}{6} = 16.6\%$,
 suma

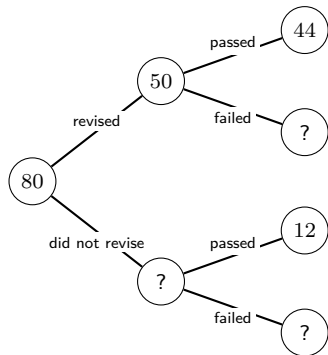
which is below 50%, so a sum of 7 is still mało prawdopodobne
 unlikely.

2. The two dice are rolled 180 times. How many times would you expect a sum of 5?

$$\frac{4}{20} = \frac{1}{5}, \text{ and } \frac{1}{5} \times 180 = 20 \text{ times}$$

Starter 6 (1 of 3)

80 pupils sat a test. 50 of them revised. Of the pupils who revised, 44 passed. Of the pupils who did not revise, 12 passed. One of the 80 pupils is then chosen at **random** .



ułamek dziesiętny

1. Write $\frac{3}{8}$ as a **decimal** and as a **percent** **percentage**.

2. A bag holds 9 red and 1 blue counter. Is taking a red counter **likely** ? Give $P(\text{red})$ as a **percent** **percentage**.

drzewko częstości

3. Complete the **frequency tree** .

Starter 6 (1 of 3)

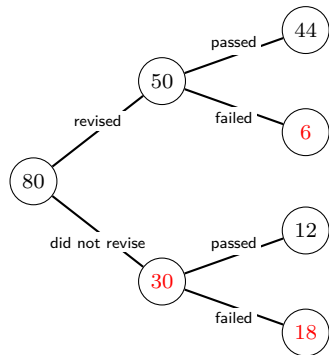
80 pupils sat a test. 50 of them

revised. Of the pupils who revised,

44 passed. Of the pupils who did

not revise, 12 passed. One of the 80

pupils is then chosen at **random**.



ułamek dziesiętny

1. Write $\frac{3}{8}$ as a **decimal** and as a **percent** **percentage**. $0.375 = 37.5\%$

2. A bag holds 9 red and 1 blue counter. Is taking a red counter **likely**? Give $P(\text{red})$ as a **percentage**. $\frac{9}{10} = 90\%$, so **likely**.

drzewko częstości

3. Complete the **frequency tree**.

Starter 6 (2 of 3)

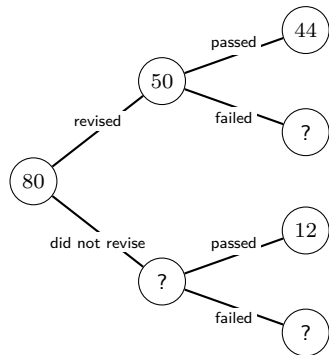
80 pupils sat a test. 50 of them

revised. Of the pupils who revised,

44 passed. Of the pupils who did

not revise, 12 passed. One of the 80

pupils is then chosen at **random**.



1. How many pupils passed the test altogether?

2. Write $P(\text{revised})$ in its **najprostsza postać** **simplest form**.

3. Write $P(\text{revised and failed})$ in its **najprostsza postać** **simplest form**.

Starter 6 (2 of 3)

80 pupils sat a test. 50 of them

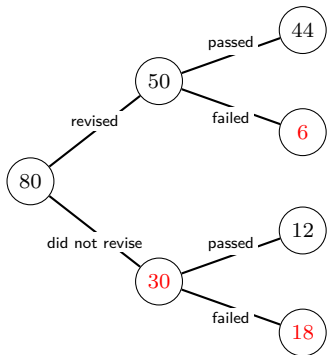
revised. Of the pupils who revised,

44 passed. Of the pupils who did

not revise, 12 passed. One of the 80

losowy

pupils is then chosen at random.



1. How many pupils passed the test altogether?

$$44 + 12 = 56$$

najprostsza postać

2. Write $P(\text{revised})$ in its simplest form .

$$\frac{50}{80} = \frac{5}{8}$$

3. Write $P(\text{revised and failed})$ in its najprostsza postać

simplest form . $\frac{6}{80} = \frac{3}{40}$

Starter 6 (3 of 3)

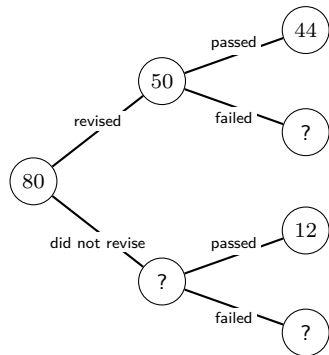
80 pupils sat a test. 50 of them

revised. Of the pupils who revised,

44 passed. Of the pupils who did

not revise, 12 passed. One of the 80

pupils is then chosen at **random**.



ułamek

1. Write $P(\text{passed})$ as a **fraction**, a **ułamek dziesiętny** **procent** **decimal** and a **percentage**.

prawdopodobne

2. Is a pupil who revised more **likely**

to pass than a pupil who did not revise? Use **prawdopodobieństwo**

probabilities

to explain your

answer.

Starter 6 (3 of 3)

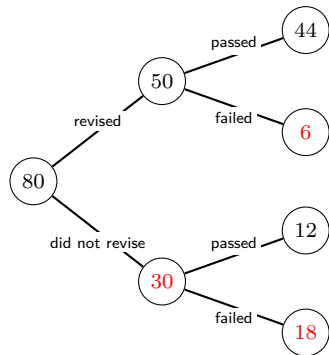
80 pupils sat a test. 50 of them

revised. Of the pupils who revised,

44 passed. Of the pupils who did

not revise, 12 passed. One of the 80

pupils is then chosen at **random**.



ułamek

1. Write $P(\text{passed})$ as a **fraction**, a **ułamek dziesiętny** **procent** **decimal** and a **percentage**.

$$\frac{56}{80} = \frac{7}{10} = 0.7 = 70\%$$

prawdopodobne

2. Is a pupil who revised more **likely**

to pass than a pupil who did not revise? Use

prawdopodobieństwo

probabilities

to explain your

answer. **Yes:** $\frac{44}{50} = 88\%$ of those who revised

passed, against $\frac{12}{30} = 40\%$ of those who did

not.

Starter 7 (1 of 3)

ułamek

najprostsza postać

1. Write 0.65 as a **fraction** in its **simplest form** .

procent

2. Write $\frac{7}{8}$ as a **percentage**.

procent

3. A bag holds 7 green and 3 red counters. Write $P(\text{green})$ as a **percentage**.

Starter 7 (1 of 3)

ułamek

najprostsza postać

1. Write 0.65 as a **fraction** in its **simplest form** . $\frac{65}{100} = \frac{13}{20}$

procent

2. Write $\frac{7}{8}$ as a **percentage**. **87.5%**

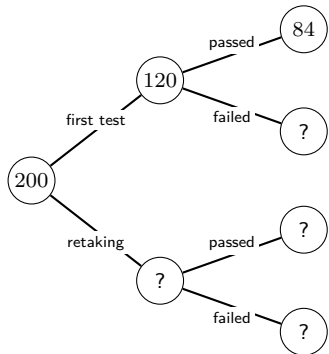
procent

3. A bag holds 7 green and 3 red counters. Write $P(\text{green})$ as a **percentage**.

$$\frac{7}{10} = 70\%$$

Starter 7 (2 of 3)

200 people took a driving test. 120 of them were taking it for the first time, and 84 of those passed. Altogether 130 people passed.

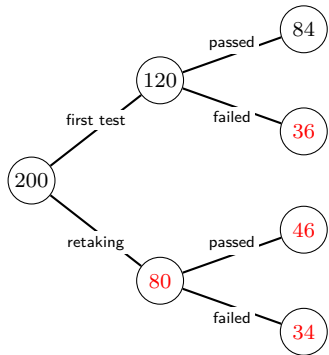


drzewko częstości

1. Complete the frequency tree .
najprostsza postać
2. Write $P(\text{passed})$ in its simplest form
procent
and as a percentage.
prawdopodobieństwo
3. Write the probability that a
person took the test for the first time and
passed.

Starter 7 (2 of 3)

200 people took a driving test. 120 of them were taking it for the first time, and 84 of those passed. Altogether 130 people passed.



drzewko częstości

1. Complete the frequency tree .
najprostsza postać
2. Write $P(\text{passed})$ in its simplest form
procent

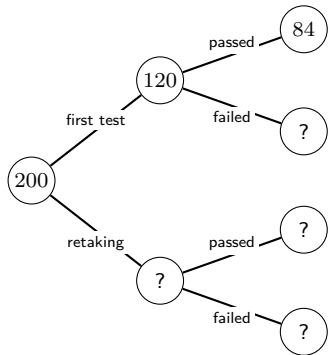
and as a percentage. $\frac{130}{200} = \frac{13}{20} = 65\%$

prawdopodobieństwo

3. Write the probability that a
person took the test for the first time and
passed. $\frac{84}{200} = \frac{21}{50}$

Starter 7 (3 of 3)

200 people took a driving test. 120 of them were taking it for the first time, and 84 of those passed. Altogether 130 people passed.



procent

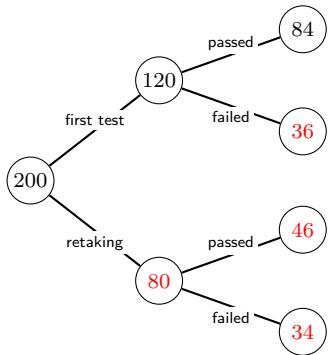
1. What **percentage** passed on a first test, and **procent** what **percentage** passed on a retake?

prawdopodobne

2. Jo says "people are more **likely** to pass a retake, because they have had more practice". Do these figures support Jo?

Starter 7 (3 of 3)

200 people took a driving test. 120 of them were taking it for the first time, and 84 of those passed. Altogether 130 people passed.



procent

1. What **percentage** passed on a first test, and **procent** what **percentage** passed on a retake?

$$\frac{84}{120} = 70\% \text{ and } \frac{46}{80} = 57.5\%$$

prawdopodobne

2. Jo says "people are more **likely**

to pass a retake, because they have had more practice". Do these figures support Jo? **No:**
70% passed on a first test, but only 57.5% on a retake.

Starter 8 (1 of 3)

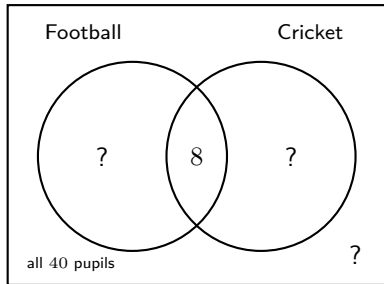
40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

losowy

chosen at random .



ułamek

1. Write 0.2 as a fraction in its najprostsza postać and as a procent simplest form and as a percentage.

2. A café sells 4 sandwiches and 3 drinks. How many deals of one sandwich and one drink are there?
3. How many pupils play football but not cricket?

Starter 8 (1 of 3)

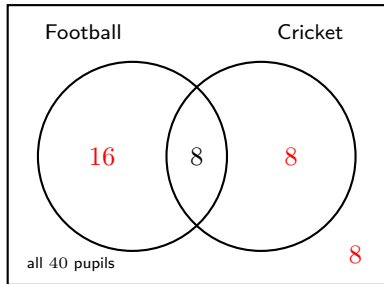
40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

chosen at

random .



ułamek

1. Write 0.2 as a fraction in its simplest form and as a percentage.

$$\frac{1}{5} = 20\%$$

2. A café sells 4 sandwiches and 3 drinks. How many deals of one sandwich and one drink are there? $4 \times 3 = 12$
3. How many pupils play football but not cricket? $24 - 8 = 16$

Starter 8 (2 of 3)

40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

losowy

chosen at random .

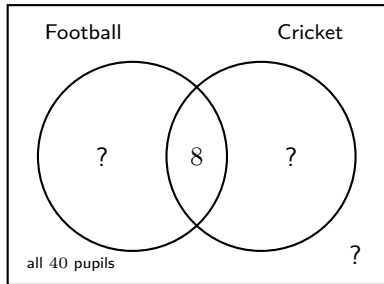


diagram Venna

1. Complete the Venn diagram .
najprostsza postać
2. Write $P(\text{cricket})$ in its simplest form
procent
and as a percentage.
3. Write $P(\text{neither sport})$ in its
najprostsza postać
simplest form .

Starter 8 (2 of 3)

40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

losowy

chosen at random.

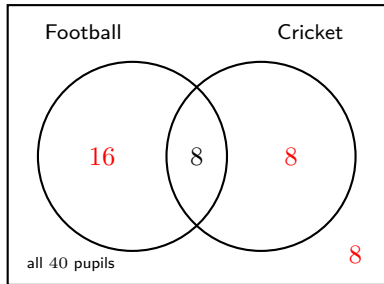


diagram Venna

1. Complete the Venn diagram.

najprostsza postać

2. Write $P(\text{cricket})$ in its simplest form
procent

and as a percentage. $\frac{16}{40} = \frac{2}{5} = 40\%$

3. Write $P(\text{neither sport})$ in its
najprostsza postać

simplest form . $\frac{8}{40} = \frac{1}{5}$

Starter 8 (3 of 3)

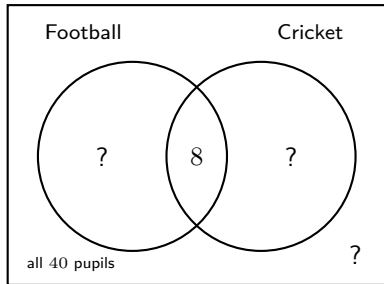
40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

losowy

chosen at random .



1. Write $P(\text{football or cricket})$ in its
najprostsza postać procent
simplest form and as a percentage.

2. $P(\text{football}) + P(\text{cricket}) = \frac{3}{5} + \frac{2}{5} = 1$, but

$P(\text{football or cricket}) = \frac{4}{5}$. Explain why these
are different.

Starter 8 (3 of 3)

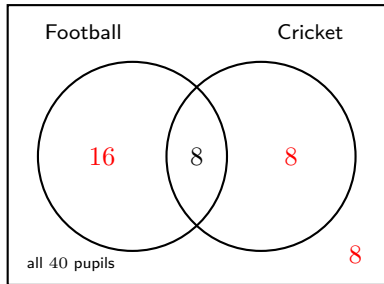
40 pupils were asked which sports they

play. 24 play football, 16 play cricket,

and 8 play both. One pupil is then

losowy

chosen at random .



1. Write $P(\text{football or cricket})$ in its
najprostsza postać procent
simplest form and as a percentage.

$$\frac{32}{40} = \frac{4}{5} = 80\%$$

2. $P(\text{football}) + P(\text{cricket}) = \frac{3}{5} + \frac{2}{5} = 1$, but

$P(\text{football or cricket}) = \frac{4}{5}$. Explain why these

are different. The 8 who play both are in

both circles, so they are counted twice.

Starter 9 (1 of 3)

One of the numbers from 1 to 20 is

losowy

chosen at random .

wielokrotność

liczba parzysta

multiples

of 3

even numbers

all numbers 1 to 20

ułamek dziesiętny

1. Write $\frac{3}{20}$ as a

decimal

and as

procent

a percentage.

ułamek

2. Write 35% as a fraction in its

najprostsza postać

simplest form .

3. Write each number from 1 to 20 in the

correct region.

Starter 9 (1 of 3)

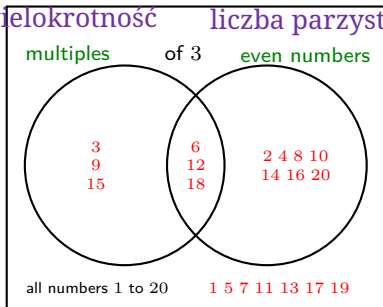
One of the numbers from 1 to 20 is

losowy

chosen at random .

wielokrotność

liczba parzysta



ułamek dziesiętny

1. Write $\frac{3}{20}$ as a decimal and as a procent

a percentage. $0.15 = 15\%$

ułamek

2. Write 35% as a fraction in its najprostsza postać

simplest form . $\frac{35}{100} = \frac{7}{20}$

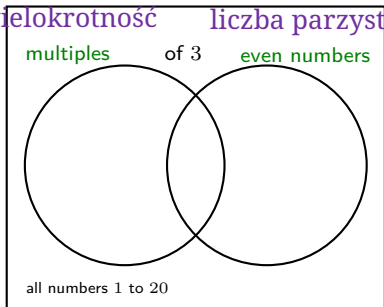
3. Write each number from 1 to 20 in the correct region.

Starter 9 (2 of 3)

One of the numbers from 1 to 20 is

chosen at random.

wielokrotność liczba parzysta



część wspólna

1. A number goes in the overlap
wielokrotność

when it is a multiple of ____.

2. Write P (multiple of 3) in its
najprostsza postać
simplest form.

prawdopodobieństwo

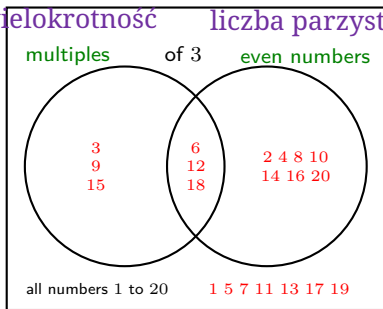
3. Write the probability that
liczba parzysta
the number is neither even number nor
wielokrotność
a multiple of 3.

Starter 9 (2 of 3)

One of the numbers from 1 to 20 is

chosen at random.

wielokrotność liczba parzysta



część wspólna

1. A number goes in the overlap
wielokrotność

when it is a multiple of 6.

2. Write P (multiple of 3) in its
najprostsza postać

simplest form . $\frac{6}{20} = \frac{3}{10}$

prawdopodobieństwo

3. Write the probability that
liczba parzysta

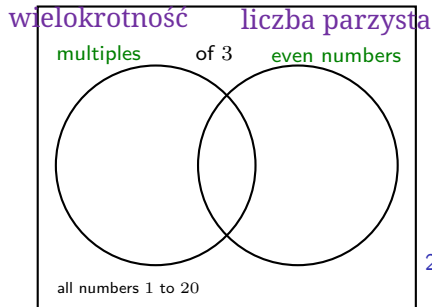
the number is neither even number nor
wielokrotność

a multiple of 3. $\frac{7}{20}$

Starter 9 (3 of 3)

One of the numbers from 1 to 20 is

chosen at random.



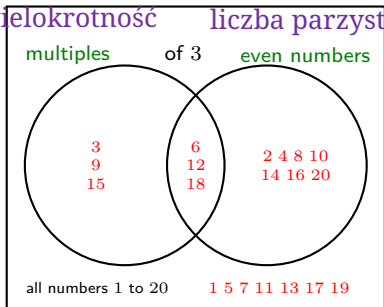
- prawdopodobne
likely or
mało prawdopodobne
unlikely to be a
wielokrotność
multiple of 3? Use its
prawdopodobieństwo
procent
probability as a percentage
- to explain.
2. Choose two new labels for the circles so that
część wspólna
the overlap must be empty, and
explain why.

Starter 9 (3 of 3)

One of the numbers from 1 to 20 is

chosen at random.

wielokrotność liczba parzysta



prawdopodobne

1. Is the number likely or
mało prawdopodobne

unlikely

to be a

wielokrotność

multiple

of 3? Use its

prawdopodobieństwo

procent

probability

as a percentage

to explain. $\frac{3}{10} = 30\%$, which is below

mało prawdopodobne

50%, so

unlikely

2. Choose two new labels for the circles so that

część wspólna

the

overlap

must be empty, and

explain why. For example "odd" and

"even": no number is both odd and even.