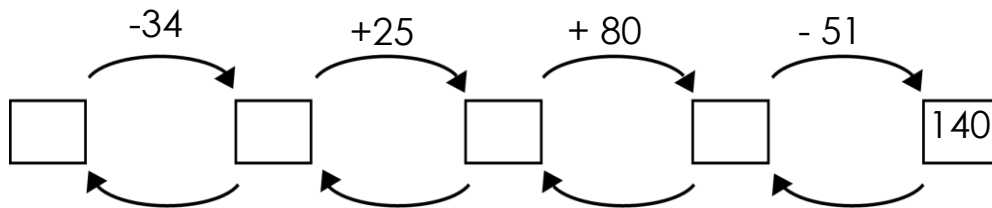# Parenthesis. Venn diagram

1 "I think of a number" game with Little Joe.
LJ thought of a number. He subtracted 34, added 25, added 80, subtracted 51, and got 34. What was the number LJ think of?

-34	+25	+ 80	- 51

☐   ☐   ☐   ☐   140

2 **In your notebook,** solve the equations and write you solutions similarly to the example. Copy your answers here. Make drawings if needed.

$345 - x = 261$ $118 + y = 239$ $z - 433 = 241$

X =   y =   z =

3 Convert:

2 m 5 dm 1cm = _____ cm   2 dm 4 cm = _____ cm

34 dm = ____ m ____ dm   34 dm = ____ m ____ cm

282 cm = ____ m ____ dm ____ cm   282 cm = ____ m ____ cm

4 How many operations are in each of the expressions below? Mark the order of operations. Do we have here the expressions where the order of operation does not matter? Why?

123 – 16 + 32   34 - 15   45 + 16 + 27 + 10

567– 345 + 118   33 + 59 – 21 + 17   252 – 149 + 71 – 124

a + b – c   m + n + k   a – c + d - m

Parentheses

In expression 8 – 4 + 1 operations are performed in the natural order: subtraction is performed before addition. In order to change the natural order, **parentheses** are used.

$$①\ ②$$
$$8 – 4 + 1 = 5$$

$$②\ ①$$
$$8 – (4 + 1) = 3$$

5 Determine the order of operations in the expressions:

a) $a – (b + c)$

b) $(a + b) – c$

c) $a – (b – c) – d$

d) $26 + (32 – 16)$

e) $93 + (12 + 16) – 35$

f). $a + (b – c + d)$

6 Mark the order of operations and find the result:

$18 + 12 – 8 – 6 = $ _____

$32 – 10 + 6 – 3 = $ _____

$18 + 12 – (8 – 6) = $ _____

$32 – (10 + 6) – 3 = $ _____

$18 + (12 – 8) – 6 = $ _____

$32 – 10 + (6 – 3) = $ _____

7 Compare:

x …… $x + 3$

$x + 3$ ….. $x + (3 + b)$

$x + 3$ …… $x + (3 – b)$

$x – 3$ ….. $x – 3 + 1$

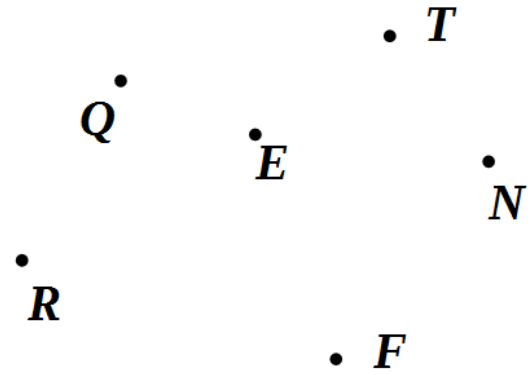$x – 3$ ……. $x – (3 + 1)$

$x – 3$ …...$x – (3 – 1)$

8

Find the intersection of straight lines **RT**, and **FQ**. Label it **G**.
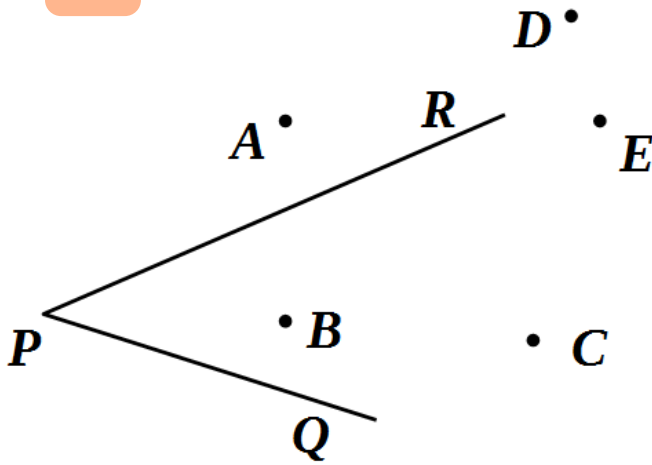
Plot straight line **GN**.

Find the intersection of straight lines Q**T**, and **RF**.

Label it **P**.

• *T*

Q

E

N

R

• *F*

9

D •

R

A •

• *E*

P

• *B*

• *C*

Q

Which of the points **A**, **B**, **C**, **D**, and **E** are located inside angle ∠**RPQ**?
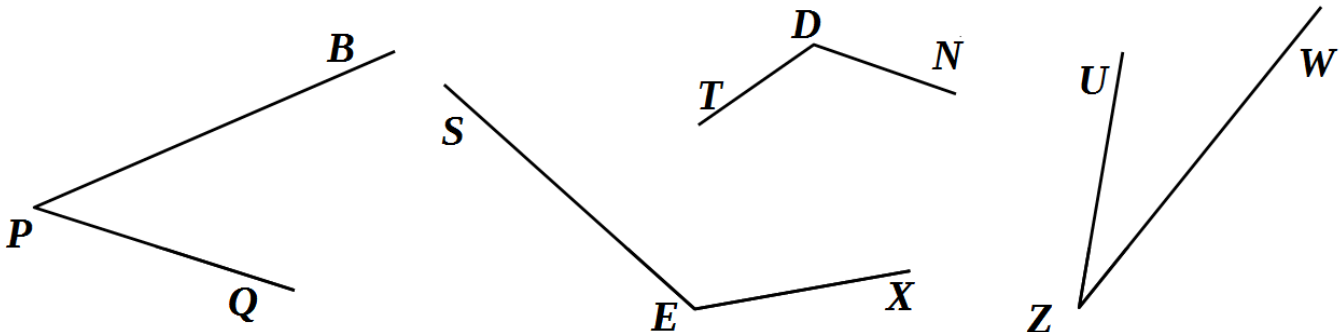
_____

Which of the points **A**, **B**, **C**, **D**, and **E** are located outside angle ∠**RPQ**?

_____

Does line segment [**CD**] intersect ray [**PR**)?

_____

10 Use a right-angle template to identify

1) angles that are bigger than the right angle_____

2) angles that are smaller than the right angle_____

B

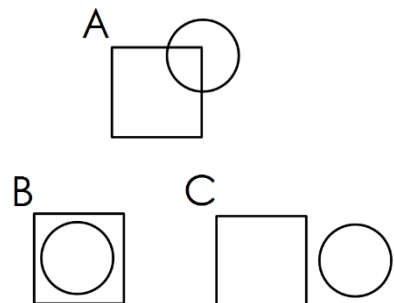*S*

D

N

*T*

U

W

P

Q

E

X

Z

Venn diagram

A Venn diagram is an illustration of the relationships between the groups of objects that have something in common.

Which picture (A, B, or C) represents:

- Set of apples and set of oranges: _____

- Set of apples and set of yellow apples: _____

- Set of yellow fruits and set of apples: _____

A

B   C

| 11 | Write the plate numbers into the **Venn diagram**. How many plates are in each set? Write the answers in the table. |
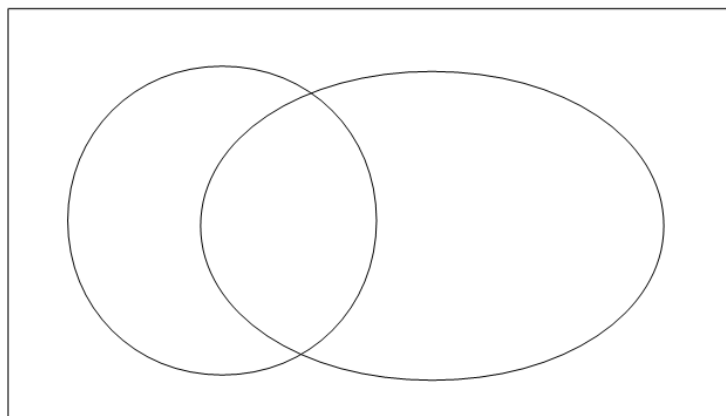
Sets	
	- Plates on the picture 8
⬭	- Plates with apples
⬭	- Plates with pears
⬭	- Plates with both apples and pears
⬭	- Plates with fruits (either apples or pears)
⬭	- Plates without fruits

1

2

3

4

5

7

8

9