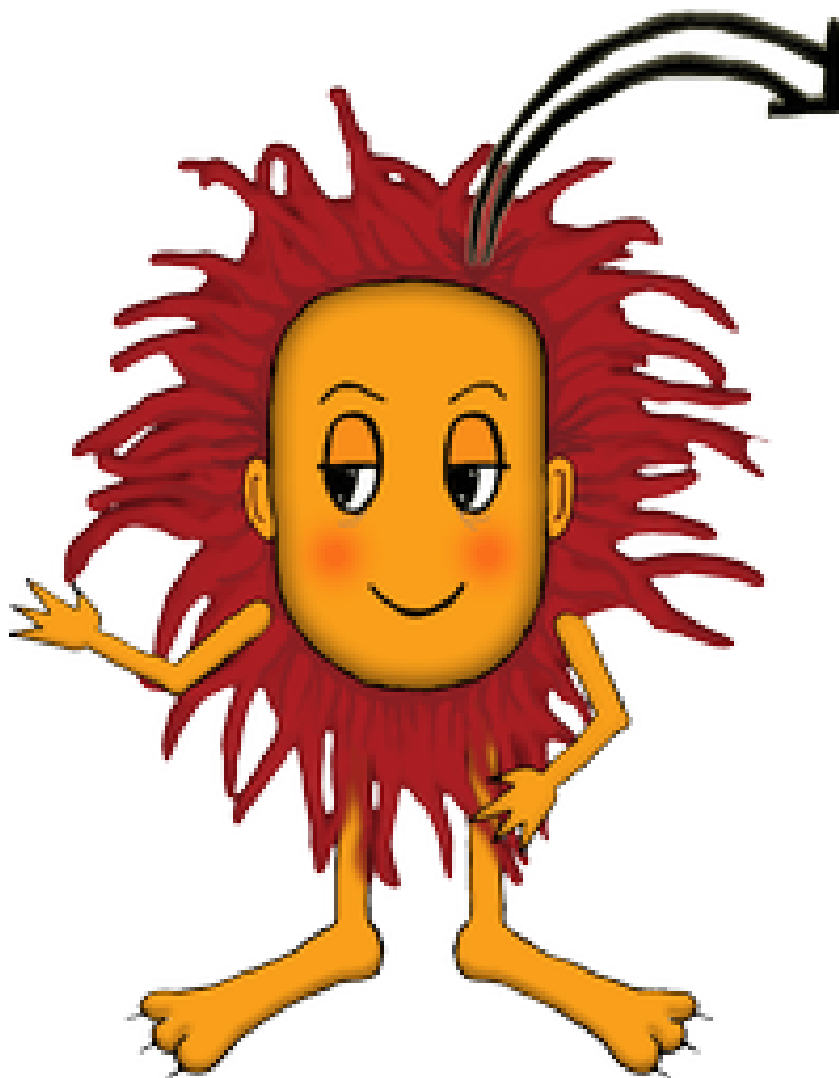


Velika logična pošast



Enačbe  $|ax+b|+|cx+d|=e$

Reši enačbo oblike  
 $|ax+b|+|cx+d|=e$ .

1.

$$|x - 1| + |3x - 2| = 1$$

2.

$$|1 - 2x| + |2x - 3| = 4$$

3.

$$|5x - 3| + |5x - 2| = 1$$

4.

$$|3 - 2x| + |x - 1| = 3$$

5.

$$|-2x - 1| + |4x + 3| = 1$$

6.

$$|3 - 5x| + 2|x| = 1$$

7.

$$|2x + 2| + |4x - 3| = 4$$

8.

$$|3x + 1| + |4x + 3| = 7$$

9.

$$|-3x - 1| + |x - 2| = 3$$

10.

$$|1 - 4x| + |4x + 3| = 5$$

11.

$$|2x - 3| + |2x + 3| = 1$$

12.

$$|3 - x| + 3|x| = 2$$

13.

$$|-4x - 3| + |2 - 3x| = 4$$

14.

$$|-x - 1| + |4x + 3| = 1$$

15.

$$|-4x - 3| + |-3x - 3| = 5$$

16.

$$|2 - 2x| + |4x + 3| = 7$$

17.

$$|2x + 1| + |4x + 1| = 7$$

18.

$$|-3x - 3| + 5|x| = 7$$

19.

$$|-x - 1| + |x| = 3$$

20.

$$|-3x - 3| + |2x + 2| = 3$$

21.

$$|3 - 4x| + |2x - 3| = 6$$

22.

$$5|x| + |4x - 1| = 2$$

23.

$$|-4x - 1| + |1 - x| = 6$$

24.

$$|1 - 4x| + |4x + 3| = 5$$

25.

$$6|x| = 1$$

26.

$$|-4x - 2| + |5x + 2| = 7$$

27.

$$|3 - 3x| + |3 - 2x| = 1$$

28.

$$|2 - 5x| + 4|x| = 7$$

29.

$$|-x - 3| + |3x + 2| = 1$$

30.

$$|1 - 4x| + |-x - 3| = 3$$

31.

$$|-4x - 3| + |-3x - 1| = 3$$

32.

$$|-5x - 2| + |1 - 4x| = 4$$

33.

$$2|-3x - 1| = 5$$

34.

$$|1 - 5x| + |4x + 2| = 4$$

35.

$$|3x + 1| + |3x + 2| = 3$$

36.

$$|-4x - 1| + |2 - 4x| = 5$$

37.

$$|-3x - 2| + 4|x| = 3$$

38.

$$|-5x - 2| + |1 - 5x| = 2$$

39.

$$|4x - 2| + |5x - 1| = 5$$

40.

$$|-x - 1| + |x + 2| = 1$$

41.

$$|-x - 2| + |2x + 3| = 1$$

42.

$$|3 - 5x| + |3x - 1| = 7$$

43.

$$5|x| + |4x + 2| = 6$$

44.

$$|3x - 2| + |5x + 1| = 1$$

45.

$$|-x - 1| + |x - 2| = 4$$

46.

$$|-4x - 1| + |2 - 2x| = 5$$

47.

$$|-2x - 2| + |3x - 2| = 2$$

48.

$$|2 - 4x| + |-x - 1| = 2$$

49.

$$|3 - 4x| + |x - 2| = 4$$

50.

$$|3 - x| + |2x - 2| = 7$$

Rešitve:

1.

$$x = \frac{1}{2} \vee x = 1$$

2.

$$x = 0 \vee x = 2$$

3.

$$\frac{2}{5} \leq x \leq \frac{3}{5}$$

4.

$$x = \frac{1}{3} \vee x = \frac{7}{3}$$

5.

$$x = -\frac{5}{6} \vee x = -\frac{1}{2}$$

6.

protislovna enačba

7.

$$x = \frac{1}{2} \vee x = \frac{5}{6}$$

8.

$$x = -\frac{11}{7} \vee x = \frac{3}{7}$$

9.

$$x = -\frac{1}{2} \vee x = 0$$

10.

$$x = -\frac{7}{8} \vee x = \frac{3}{8}$$

11.

protislovna enačba

12.

protislovna enačba

13.

protislovna enačba

14.

$$x = -1 \vee x = -\frac{3}{5}$$

15.

$$x = -\frac{11}{7} \vee x = -\frac{1}{7}$$

16.

$$x = -\frac{4}{3} \vee x = 1$$

17.

$$x = -\frac{3}{2} \vee x = \frac{5}{6}$$

18.

$$x = -\frac{5}{4} \vee x = \frac{1}{2}$$

19.

$$x = -2 \vee x = 1$$

20.

$$x = -\frac{8}{5} \vee x = -\frac{2}{5}$$

21.

$$x = 0 \vee x = 2$$

22.

$$x = -\frac{1}{9} \vee x = \frac{1}{3}$$

23.

$$x = -\frac{6}{5} \vee x = \frac{6}{5}$$

24.

$$x = -\frac{7}{8} \vee x = \frac{3}{8}$$

25.

$$x = -\frac{1}{6} \vee x = \frac{1}{6}$$

26.

$$x = -\frac{11}{9} \vee x = \frac{1}{3}$$

27.

$$x = 1$$

28.

$$x = -\frac{5}{9} \vee x = 1$$

29.

protislovna enačba

30.

protislovna enačba

31.

$$x = -1 \vee x = -\frac{1}{7}$$

32.

$$x = -\frac{5}{9} \vee x = \frac{1}{3}$$

33.

$$x = -\frac{7}{6} \vee x = \frac{1}{2}$$

34.

$$x = -\frac{5}{9} \vee x = \frac{1}{3}$$

35.

$$x = -1 \vee x = 0$$

36.

$$x = -\frac{1}{2} \vee x = \frac{3}{4}$$

37.

$$x = -\frac{5}{7} \vee x = \frac{1}{7}$$

38.

protislovna enačba

39.

$$x = -\frac{2}{9} \vee x = \frac{8}{9}$$

40.

$$-2 \leq x \leq -1$$

41.

$$x = -2 \vee x = -\frac{4}{3}$$

42.

$$x = -\frac{3}{8} \vee x = \frac{11}{8}$$

43.

$$x = -\frac{8}{9} \vee x = \frac{4}{9}$$

44.

protislovna enačba

45.

$$x = -\frac{3}{2} \vee x = \frac{5}{2}$$

46.

$$x = -\frac{2}{3} \vee x = 1$$

47.

protislovna enačba

48.

$$x = \frac{1}{3} \vee x = \frac{3}{5}$$

49.

$$x = \frac{1}{5} \vee x = \frac{5}{3}$$

50.

$$x = -\frac{2}{3} \vee x = 4$$

Referenca:

Izidor Hafner Inequalities and Equations with Absolute Values

<http://demonstrations.wolfram.com/InequalitiesAndEquationsWithAbsoluteValues/Wolfram>

Demonstrations Project

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