

Homework #2

Assigned on September 27, 2020

Difficult problems are marked with * and are optional

1. Which of the following numbers are divisible by 3 and which of them are also divisible by 9?

1. 75 432
2. 2 772 825
3. 5 402 070

2. Which of the following numbers are divisible by 11?

- a. 1331
- b. 102
- c. 9009
- d. 90009
- e. 1826

3. Each number below is divisible by 3. One digit is covered with a smiley face. Try to guess what digit is hidden (you may get more than one answer)

2😊5

46😊

7346😊

4😊56

5😊3

4. Each number below is divisible by 9. One digit is covered with a smiley face. Try to guess what digit is hidden.

8😊5

99😊

73😊46

😊34

114😊5

5. Solve the following equations:

a. $5x - 20 = 65$

b. $\frac{100}{x-2} = 25$

c. $\frac{3x}{6} = 5$

6. Mike has 5 candies more than John. John has 8 candies less than Sam. Together they have 19 candies. How many candies does each boy have?

8. Draw two rays AB and CD so that they intersect:

a) by a point

b) by a segment

c) by a ray

d) don't intersect at all

8. (a) On the segment AB mark a point " M ". How many segments do we have on the picture?

(b) Mark a second point " P ". How many segments do we have now?

(c) Mark a third point " F ". Count segments.

(d) How many segments will be if you mark 5 points on the segment AB ?

(e) How many segments will be if you mark 10 points on the segment AB ?

* (f) How many segments will be if you mark 99 points on the segment AB ?