

EXAMEN DIVISIBILIDAD Y NÚMEROS ENTEROS

Exercise 1: (0.75 points) Find a value of x so these numbers can be divided by the figure given:

- a) $73x42$ divided by 5
- b) $9423x$ divided by 11
- c) $7x821$ divided by 3

Exercise 2: (1 point) Can the following numbers be divided by 2, 3, 5, 10 or 11?

- a) 71
- b) 12540
- c) 2835
- d) 19758

Exercise 3: (2 points) Calculate:

- a) $\text{lcm}(24, 100) =$
- b) $\text{hcf}(36, 49) =$
- c) $\text{lcm}(30, 50, 56) =$
- d) $\text{hcf}(42, 105, 147) =$

Exercise 4: (0.75 points) True or false? Justify your answer:

- a) 8 is a multiple of 32
- b) 27 is a multiple of 5
- c) 28 is a divisor of 9
- d) 6 is a divisor of 42

Exercise 5: (0.5 points) We want to divide ninety doughnuts into equal boxes. How many possibilities are there? List them all.

Exercise 6: (1 point) Classify and represent on the number line:

3 -7 -5 0 4 1 7 -10

Exercise 7: (1 point) Work out the value of the following expressions:

- a) $-6 - 2 - 7 - 4 =$
- b) $(-4) \cdot (+6) =$
- c) $+5 + 2 =$
- d) $(-28) : (-4) =$

Exercise 8: (1 point)

Jenny got out of her house on the fourth floor and went up three floors to visit her mother. Then she went down seven floors to say hello to her friend Monica and another three floors to get her car and go to work. Where is the car?

Exercise 9: (2 points) Work out the value of the following expressions:

- a) $-2 + 7 + 3 - 8 + 1 - 4 + 8 - 9 =$
- b) $-(-6) + (-2) - (+4) + (+7) =$
- c) $(3-7) - (4-9) + (9-7) - (5-1) =$
- d) $2 + 7 \cdot (6-7) - (2-10) : (+4) =$
- e) $(-2)(4-7) - (-3)(8-6) =$
- f) $-3(6-8) - 2 [(-4+6) - (6+5)] =$