

EXAMEN DIVISIBILIDAD Y NÚMEROS ENTEROS

Exercise 1: (0.5 points) True or false? Justify your answer:

- a) 28 is a multiple of 7
- b) 30 is a divisor of 6

Exercise 2: (0.75 points) Find a value of x so these numbers can be divided by the figure given:

- a) $4932x$ divided by 11
- b) $8x237$ divided by 5
- c) $54739x$ divided by 3

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

- a) 21340
- b) 1527
- c) 83
- d) 2475

Exercise 4: (2 points) Calculate:

- a) $\text{lcm}(36, 100) =$
- b) $\text{hcd}(49, 81) =$
- c) $\text{lcm}(12, 50, 63) =$
- d) $\text{hcd}(28, 84, 70) =$

Exercise 5: (1 point) I have 75 pineapple juice tetra-bricks, 150 orange juice tetra-bricks and 100 red berries juice tetra-bricks. I want to pack them in boxes with the same number of tetra-bricks, without mixing the different flavours. How many bricks will I have in each box?

Exercise 6: (1 point) Classify and draw 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) $-7 - 1 - 9 - 3 =$
- b) $(-5) \cdot (+7) =$
- c) $+3 + 7 =$
- d) $(-21) : (-7) =$

Exercise 8: (0.75 points) A man was born on the year 42 b.C. and died on the year 27 s.C. How old was he when he died?

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

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