

Determining Relationships Between Truth Sets

Reference:

Hub, A., & Dawkins, P. C. (2018). On the construction of set-based meanings for the truth of mathematical conditionals. *The Journal of Mathematical Behavior*, 50, 90-102.

Group Task

For each pair of open statements given below, work with your group to draw an appropriate Euler diagram and describe the relationship between their truth sets.

1. $P(x)$: x is a multiple of 3.

$Q(x)$: x is a multiple of 6.

2. $P(x)$: x is a multiple of 4.

$Q(x)$: x is a multiple of 5.

3. $P(x)$: x is odd.

$Q(x)$: x is a multiple of 4.