

Problems about two (possibly intersecting) sets
(where there is one correct answer)

name: _____

10 am/2 pm

1. There are 28 students in Mr Johnson's class.

- 22 of the students have a fidget spinner or a cell phone.
- 10 students have both a fidget spinner and a cell phone.
- Half of Mr Johnson's students do not have a cell phone.

→ $28 - 22 = 6$ 6 have neither
 → half do have a cell phone
 14

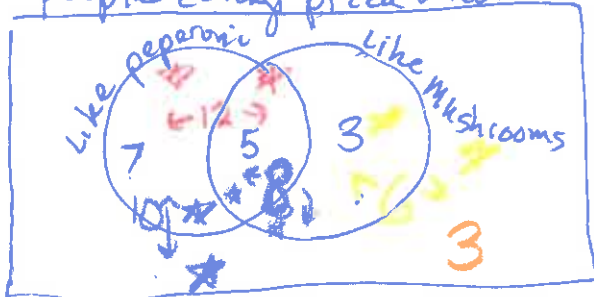
How many students have a fidget spinner?



18 have a f.s.

2. 18 people will be eating pizza. 12 people like pepperoni. 10 people do not like mushrooms. 3 people like neither mushrooms nor pepperoni. How many people like both mushrooms and pepperoni?

People eating pizza who...



12 Like pepperoni → 6 don't like p.
 10 don't like mushrooms → 8 do like m

$$O = 3$$

$$L + M = 12$$

$$L + O = 10$$

$$3$$

$$R + O = 6$$

$$R + 3 = 6 \text{ so } R = 3$$

5 like both

3. There are 24 animals in the petting zoo.

- 10 of the animals are not small enough to pick up
- 18 of the animals are furry
- 4 animals are not furry and are not small enough to pick up.

How many animals that are small enough to pick up are not furry?