**Lower Elementary:**

*Question:* Each of 4 cats has 4 kittens. Each of the kittens has 10 whiskers. How many kitten whiskers are there?

**Upper Elementary:**

*Question:* Anna has three cats. One is orange, one is brown, and one is white. The white cat is not the oldest. The brown cat is older than the orange cat. The orange cat is younger than the white cat. Put Anna’s cats in order from youngest to oldest.

**Middle School:**

*Question:* The cost per day of Kitty Kare cat sitters is $21.00 plus $9.00 per cat. Furbaby Sitters charge $26.00 and $4.00 per cat. Cameron is going out of town for two days and needs a sitter for his three cats. How much money does Cameron save by choosing Furbaby Sitters instead of Kitty Kare?

**Algebra and Up:**

*Question:* A cat starts chasing a mouse from 10 metres away. The cat runs at a rate of 14 metres per second, and the mouse scampers at a rate of 4 metres per second. How many seconds will it take the cat to catch the mouse?

**Lower Elementary:**

*Question:* Each of 4 cats has 4 kittens. Each of the kittens has 10 whiskers. How many kitten whiskers are there?

*Answer:* 160 whiskers

*Solution:* If each of the 4 cats has 4 kittens, then there are 4 × 4 = 16 kittens. If each kitten has 10 whiskers, then there are 16 × 10 = 160 whiskers.

**Upper Elementary:**

*Question:* Anna has three cats. One is orange, one is brown, and one is white. The white cat is not the oldest. The brown cat is older than the orange cat. The orange cat is younger than the white cat. Put Anna’s cats in order from youngest to oldest.

*Answer:* orange, white, brown

*Solution:* Since the white cat is not the oldest, it can only be the youngest or middle cat. That means that for the brown cat to be older than the orange cat, the brown cat has to be the oldest because the orange cat and the white cat must be the two younger cats. Since the orange cat is younger than the white cat, we can conclude that the order is orange, white, then brown.

**Middle School:**

*Question:* The cost per day of Kitty Kare cat sitters is $21.00 plus $9.00 per cat. Furbaby Sitters charge $26.00 and $4.00 per cat. Cameron is going out of town for two days and needs a sitter for his three cats. How much money does Cameron save by choosing Furbaby Sitters instead of Kitty Kare?

*Answer:* $20.00

*Solution:* Since Cameron has three cats, Kitty Care costs $21.00 + $9.00 × 3 = $48.00 per day. Furbaby Sitters costs $26.00 + $4.00 × 3 = $38.00 per day. That means that Kitty Care would cost Cameron $48.00 – $38.00 = $10.00 more per day. So, Cameron saves $10.00 × 2 = $20.00.

**Algebra and Up:**

*Question:* A cat starts chasing a mouse from 10 metres away. The cat runs at a rate of 14 metres per second, and the mouse scampers at a rate of 4 metres per second. How many seconds will it take the cat to catch the mouse?

*Answer:* 1 second

*Solution:* Since the mouse starts 10 metres ahead, we need to set up an equation in which the distance the cat runs is 10 metres more than the distance the mouse runs: 14***t*** = 10 + 4***t***. That’s equivalent to 10***t*** = 10, so ***t*** = 1 second.