
# Answer Key

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## Answer Key

## Practice Problem #2

Iglopuk, an Inuit entrepreneur from Gnome, Alaska, took a cab from the Miami airport to the Everglades. When he jumped in the cab, it was a blazing 98 degrees inside! The cabbie apologized for the heat but confessed that his air conditioner had been broken for a week. Without skipping a beat, Iglopuk opened his bag and flipped on the air conditioner he'd made out of an old VCR, baling wire and a used A/B switch. By the time the cab reached the Everglades, it was 32 degrees cooler inside the cab than it had been at the airport. What temperature was it inside the cab when they got to the Everglades?

98 degrees
- 32 degrees
66 degrees

It was 66 degrees inside the cab when they reached the Everglades.

## Practice Problem #3

Nevil the Rat knows that there are 37 treats on the third shelf of the bookcase. As a sensible rat, he loves treats, food, and just about anything he can put in his mouth and digest. After three days of failed attempts, he is finally able to get to the third shelf by climbing up the pile of laundry to the chair, the chair to the windowsill, and, with nothing more than a dangerous lateral leap, to the shelf and his prize. Hungry from his climb, Nevil promptly consumes 18 of the treats until he is discovered, scolded and put back in his cage. How many treats are left for Nevil's next excursion?

37 treats
- 18 treats
19 treats

Nevil has 19 treats left.

## Practice Problem #1

~~Seth and Maggie could not believe they had spent the entire morning collecting golf balls. Seth thought the golfers at Cataract Country Club must be the worst golfers on the planet. Maggie agreed that they couldn't hit the broad side of a barn with a softball…let alone a golf ball. When they returned home, they sorted the golf balls they had found.~~ Seth put ① 7/8 of the golf balls into a box on the upper shelf. Maggie took ② 1/3 of the ① remaining golf balls and put them in a basket to sell at their Lemonade/Used Golf Ball Stand, ~~and left the rest in a bucket in the garage. Later that afternoon,~~ Mary Ellen ~~stopped by their stand for a glass of lemonade and some used golf balls. As luck would have it, she~~ needed ③ 6 golf balls and that's exactly how many golf balls Maggie had in her basket. How many golf balls total did Seth and Maggie find that day?

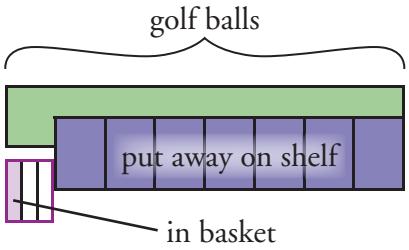
① If Seth put 7/8 of the golf balls away, what fraction remained?

$$\frac{8}{8} - \frac{7}{8} = \frac{1}{8}$$

② Maggie put 1/3 of the remaining golf balls in her basket.

$$\frac{1}{3} \text{ of } \frac{1}{8} = \frac{1}{3} \times \frac{1}{8} = \frac{1}{24}$$

Maggie put 1/24 of all the golf balls in her basket.




③ All: $1 = \frac{24}{24}$

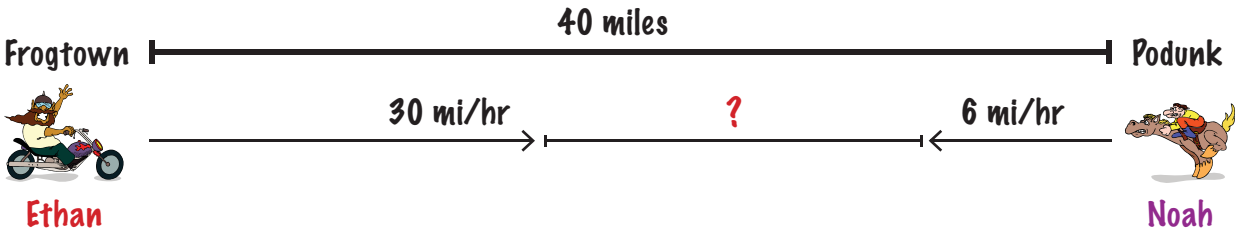
Left: $\frac{1}{24} =$ 6 balls

6 balls x 24 = 144 balls

**Seth and Maggie found a total of 144 golf balls.**

## Practice Problem #5

At ① high noon, Ethan jumped on his Hogley Favoriteson motorcycle and began the 40 mile journey from Frogtown to Podunk. At the exact same time, Noah mounted his trusty steed, Buttercup, and left Podunk and heads toward Frogtown. If Ethan travels at ⓐ 30 miles per hour and Noah squeezes ⓑ 6 miles per hour out of Buttercup, ③ how far apart will they be at ① 12:30 p.m.?




① **We know they both left at high noon, and it's now 12:30 p.m.**

12:30 p.m. – 12:00 p.m. = 30 minutes or $\frac{1}{2}$ hour of travel time.

② **Use the information about speed and time to determine the distance they each traveled.**

$D = T \times S$

ⓐ **Ethan:**

$$D = \frac{1}{2}\,\cancel{hr} \times \frac{30 \text{ mi}}{1\,\cancel{hr}} = \frac{30}{2} \text{ mi} = 15 \text{ mi}$$

ⓑ **Noah:**

$$D = \frac{1}{2}\,\cancel{hr} \times \frac{6 \text{ mi}}{1\,\cancel{hr}} = \frac{6}{2} \text{ mi} = 3 \text{ mi}$$

③ **So:** Total distance – Ethan's distance – Noah's distance = distance apart

40 mi – 15 mi – 3 mi = 22 mi

**Ethan and Noah are 22 miles apart.**