

1

Two identical coin bags plus 6 loose coins make 20 coins total.

Find how many coins are in one bag.

Hint: Let x be the number of coins in a bag.



Answer:

2

Three identical treasure chests plus 3 gold coins make 30 gold coins total.

Find how many coins are in one chest.



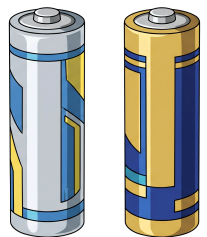
Answer:

3 (optional)

Four identical battery packs plus 2 spare batteries make 42 batteries total.

Find how many batteries are in one pack.

Hint: Let x be the number of batteries in a pack.

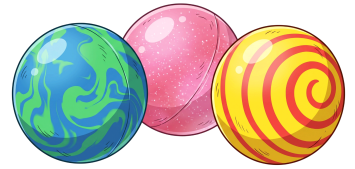


Answer:

4

Ben has some bouncy balls. **Mia** has 5 more bouncy balls than Ben. Together they have 29 bouncy balls.

Find how many bouncy balls Ben and Mia each have.



Ben:

Mia:

5

Two identical balloons weigh the same as one balloon and 8 grams.

Find the weight of one balloon.



Answer:

6 (optional)

Two identical sticker sheets and 4 loose stickers have the same number of stickers as one sticker sheet and 15 loose stickers.

How many stickers are on one sheet?



Answer:

7

On Monday, Noor read some pages. On Tuesday, Noor read 5 more pages than on Monday. On these two days together, Noor read 3 times as many pages as he read on Monday.



Find how many pages Noor read on Tuesday.

Hint: Total pages = Monday + Tuesday, and also = Monday + Monday + Monday

Answer:

8

A dragon starts with some gold coins. Then it finds 12 more coins. Now it has 3 times as many coins as it started with.



Find how many coins the dragon started with.

Answer:

9

A ticket costs some number of pounds. A snack costs **£2**. Three tickets and one snack cost the same as one ticket and five snacks.



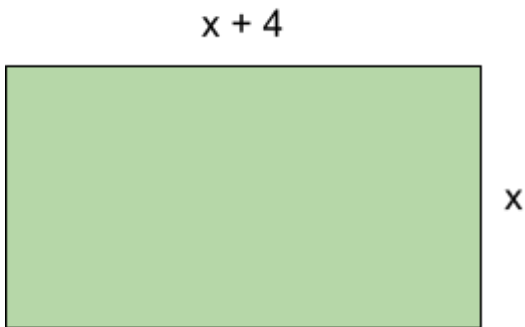
Find the cost of one ticket.

Answer:

10

A rectangular yard is built using **40 m** of fencing all the way around. The long side is **4 m** longer than the short side.

How long is the short side, and how long is the long side?

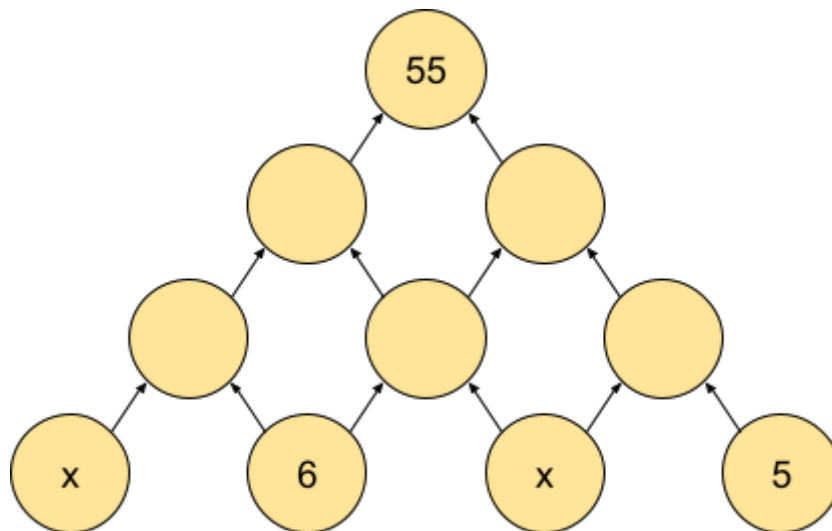


Short: Long:

11

Each block in the pyramid equals the sum of the 2 blocks directly below it.

Find the x .



Answer:

12

Four consecutive locker numbers add up to 70.

Find the smallest number.



Answer:

Answers (Introduce X)

Problem #	Answer	Equation
1	7	$x + x + 6 = 20$
2	9	$x + x + x + 3 = 30$
3	10	$x + x + x + x + 2 = 42$
4	Ben: 12, Mia: 17	$x + (x + 5) = 29$
5	8 g	$x + x = x + 8$
6	11	$x + x + 4 = x + 15$
7	10 (5 on Monday)	$x + (x + 5) = x + x + x$
8	6	$x + 12 = x + x + x$
9	£4	$x + x + x + 2 = x + 2 + 2 + 2 + 2 + 2$
10	short 8 m, long 12 m	$x + (x + 4) + x + (x + 4) = 40$
11	8	$x + x + x + x + 23 = 55$
12	16	$x + (x + 1) + (x + 2) + (x + 3) = 70$