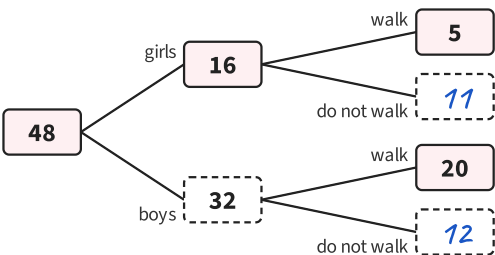


Frequency Trees

ANSWERS

1 48 students.
16 are girls.
5 of the girls walk.
20 of the boys walk.
Complete the tree.

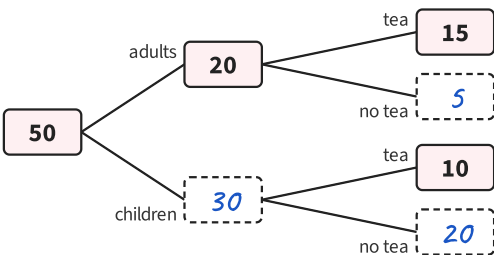
How many boys do not walk?
12



```
graph LR; 48 --> girls[16]; 48 --> boys[32]; girls --> girls_walk[5]; girls --> girls_no_walk[11]; boys --> boys_walk[20]; boys --> boys_no_walk[12];
```

2 50 people at a café.
20 are adults.
15 of the adults have tea.
10 of the children have tea.
Complete the tree.

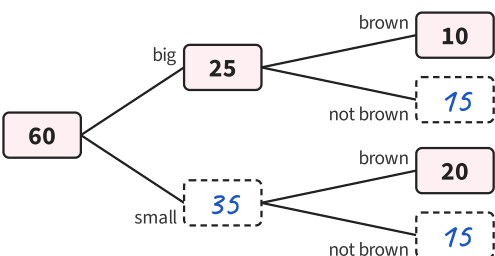
How many children have no tea?
20



```
graph LR; 50 --> adults[20]; 50 --> children[30]; adults --> adults_tea[15]; adults --> adults_no_tea[5]; children --> children_tea[10]; children --> children_no_tea[20];
```

3 60 dogs at a show.
25 are big.
10 of the big dogs are brown.
20 of the small dogs are brown.
Complete the tree.

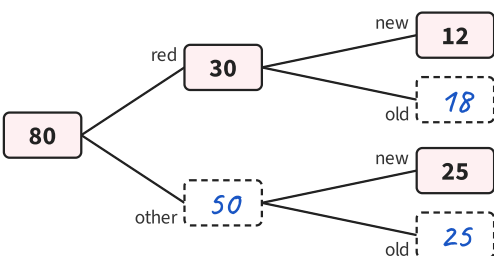
How many big dogs are not brown?
15



```
graph LR; 60 --> big[25]; 60 --> small[35]; big --> big_brown[10]; big --> big_not_brown[15]; small --> small_brown[20]; small --> small_not_brown[15];
```

4 80 cars in a car park.
30 are red.
12 of the red cars are new.
25 of the other cars are new.
Complete the tree.

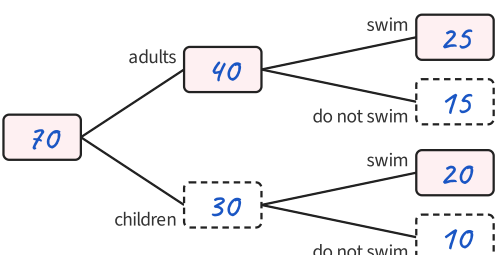
How many red cars are old?
18



```
graph LR; 80 --> red[30]; 80 --> other[50]; red --> red_new[12]; red --> red_old[18]; other --> other_new[25]; other --> other_old[25];
```

5 70 people at a pool.
40 are adults.
25 of the adults swim.
20 of the children swim.
Complete the tree.

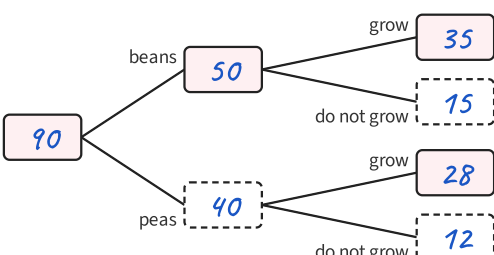
How many children do not swim?
10



```
graph LR; 70 --> adults[40]; 70 --> children[30]; adults --> adults_swim[25]; adults --> adults_no_swim[15]; children --> children_swim[20]; children --> children_no_swim[10];
```

6 90 seeds are planted.
50 are beans. The rest are peas.
35 of the beans grow.
28 of the peas grow.
Complete the tree.

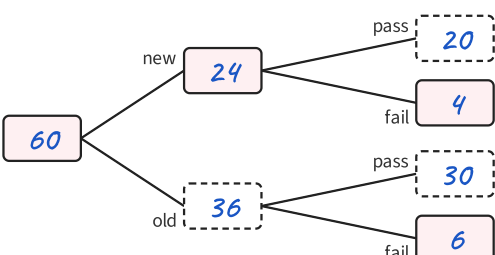
How many peas do not grow?
12



```
graph LR; 90 --> beans[50]; 90 --> peas[40]; beans --> beans_grow[35]; beans --> beans_no_grow[15]; peas --> peas_grow[28]; peas --> peas_no_grow[12];
```

7 60 phones are tested.
24 are new.
4 of the new phones fail.
6 of the old phones fail.
Complete the tree.

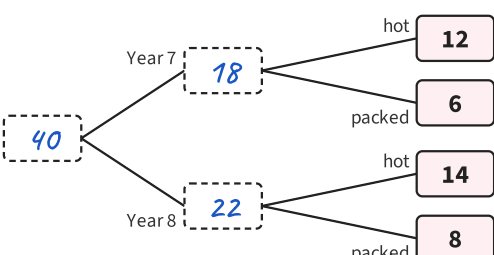
How many old phones pass?
30



```
graph LR; 60 --> new[24]; 60 --> old[36]; new --> new_pass[20]; new --> new_fail[4]; old --> old_pass[30]; old --> old_fail[6];
```

8 The tree shows students in Year 7 and Year 8.
Some have a hot lunch.
The rest have a packed lunch.
Complete the tree.

How many students are there?
40



```
graph LR; 40 --> Year7[18]; 40 --> Year8[22]; Year7 --> Year7_hot[12]; Year7 --> Year7_packed[6]; Year8 --> Year8_hot[14]; Year8 --> Year8_packed[8];
```

Frequency Trees *further practice*

ANSWERS

9

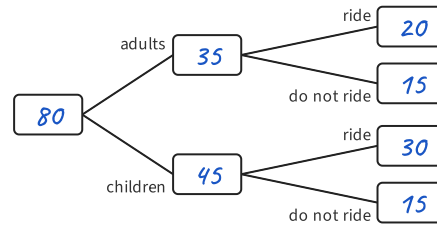


80 people at a fair.
35 are adults.
20 of the adults ride the big wheel.
30 of the children ride it.

Complete the tree.

How many adults do not ride?

15



10

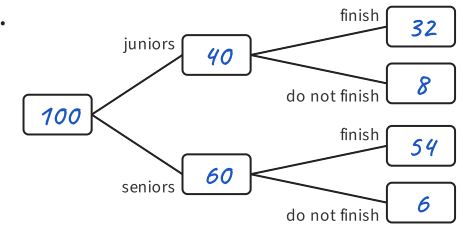


100 runners in a race.
40 are juniors. The rest are seniors.
32 of the juniors finish.
6 of the seniors do not finish.

Complete the tree.

How many seniors finish?

54



11

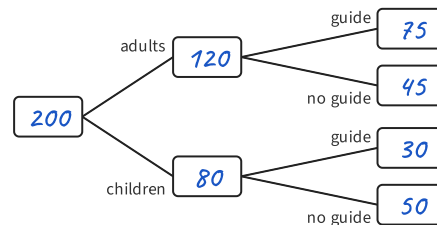


200 people visit a museum.
120 are adults.
75 of the adults buy a guide.
30 of the children buy a guide.

Complete the tree.

How many children do not buy a guide?

50



12

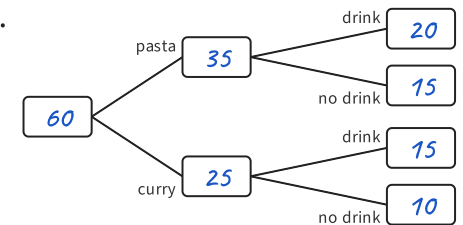


60 students have lunch.
35 have pasta. The rest have curry.
20 who have pasta have a drink.
15 who have curry have a drink.

Complete the tree.

How many students have a drink in all?

35



13

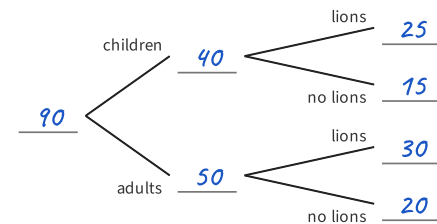


90 people visit a zoo.
40 are children.
25 of the children see the lions.
30 of the adults see the lions.

Complete the tree.

How many adults do not see the lions?

20



14

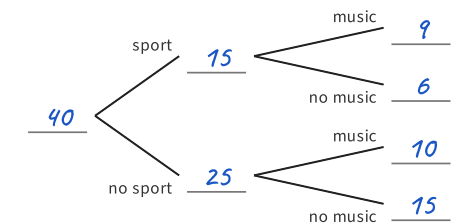


40 students. 15 play a sport.
9 of the sport players play music.
10 of the others play music.

Complete the tree.

Pick a student at random.
Find the probability they play a sport and music.

$\frac{9}{40}$



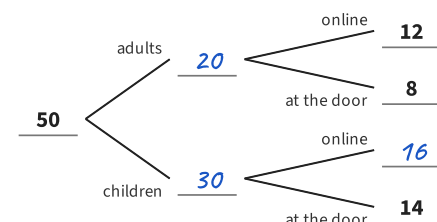
15



50 tickets are sold.
Some are for adults.
The rest are for children.
Complete the tree.

How many child tickets are sold online?

16



16



40 students.
15 are girls.
8 of the girls walk.
12 of the boys walk.
Ben drew this tree.
Find his mistake.

Ben should take 12 away from 25, not 40. $25 - 12 = 13$

