Summer Term Maths Year 10

Calculating reverse percentage problems

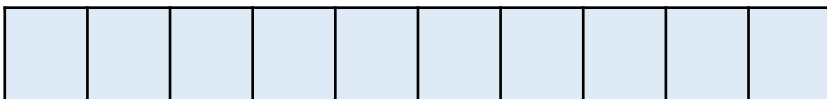**1** 20% of a number is 24

20%				

24
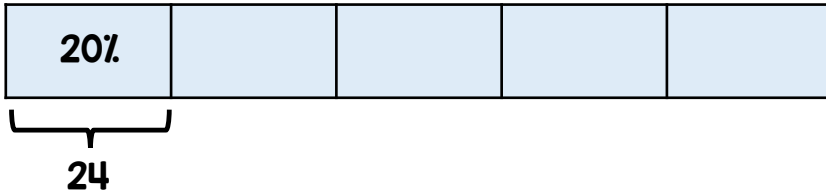
Work out.
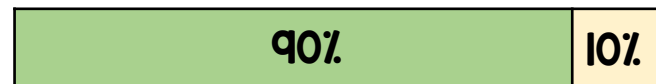
(a) 10% of this number.

(b) 40% of this number.

(c) 5% of this number.

(d) 35% of this number.

(e) What else can you find out?

2 If 60% of a number is 180, write 4 other percentages of this number. Use a bar to help you.

3 (a) If 10% of a number is 14.5, find 100%

(b) If 25% of a number is 320, find 100%

(c) If 8% of a number is 22, find 100%

(d) If 30% of a number is 12, find 100%

(e) Why are questions (c) and (d) more challenging?

4 Dexter answers 90% of the questions on a test correctly.

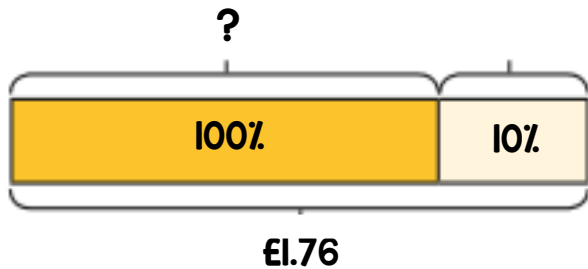He answers 54 questions correctly.

How many questions are on the test?

90%	10%

White Rose Maths

5 A shop increases the price of its milk by 10%. It now costs £1.76
How much did it cost before?

?

| 100% | 10% |

£1.76

6 A shop has reduced all dresses by 30% and all accessories by 15%

(a) A dress now costs £49. How much did it cost before the sale?

(b) A bag now cost £34.00. How much did they cost before the sale?

7 Annie and Tommy are solving a problem.

A special pack of CobHob biscuits weighs 300 g and contains 20% extra free. How much does a normal pack of CobHob biscuits weigh?

Annie's working

20% extra means the normal pack is 80% of 300 g.
0.8 × 300 = 240 g

Tommy's working

20% extra means 120% is 300 g.
So 10% is 300 ÷ 12 = 25,
so 100% is 25 × 10 = 250 g

Who do you agree with?
Explain why.

White Rose Maths