Steady Steps Maths

FREE UNIT TEST · TOPIC 2

FREE SAMPLE · UNIT TEST A

Percents

Unit Test A · 40 marks · about 40 minutes

GRADE 6



Common Core 6.RP.A.3c

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Name _____ Date _____

UNIT TEST A

Percents

40 marks · about 40 minutes · Common Core 6.RP.A.3c

Name _____ **Date** _____

Instructions

- Answer **every** question in the space given.
- Show your working: in Sections B and C you get marks for your method, even if the final answer is wrong.
- The number in brackets, like [2], shows how many marks a question is worth.
- You have about 40 minutes. A calculator is **not** needed.
- Check your answers if you finish early.

Your score

Section	Questions	Marks	Your score
A · Quick questions	1–10	10	
B · Show your working	11–16	17	
C · Problem solving	17–18	13	
Total		**40**	

Percentage: _____ % 85%+ excellent · 65–84% good · 45–64% keep practising · below 45% revise the packs first

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SECTION A Quick questions

1 mark each · write your answer in the box

1 Write 66/100 as a percent. [1]

Answer

2 Write 0.25 as a percent. [1]

Answer

3 Write 1/20 as a percent. [1]

Answer

4 Write 20% as a fraction in simplest form. [1]

Answer

5 Find 25% of 48. [1]

Answer

6 Find 10% of 720. [1]

Answer

7 Find 1% of 300. [1]

Answer

8 What percent of 20 is 7? [1]

Answer

9 50% of a number is 30. What is the number? [1]

Answer

10 Which is the smallest? 6/25 35% 0.32 [1]

Answer

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SECTION B Show your working

Marks are given for your method

11 Find 85% of 320. Show your method. [2]

Answer

12 Yara got 14 out of 35 on a quiz. What percent did she get? [2]

Answer

13 15% of a number is 18. What is the number? [3]

Answer

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14 A jacket costs 35.00. In a sale it has 40% off. [4]
(a) How much is taken off? (b) What is the sale price?

Answer

15 Which is greater: 7/25 or 30%? Show how you know. [2]

Answer

16 A family's restaurant bill is 160.00. They add a 20% tip. How much do they pay altogether? [4]

Answer

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SECTION C Problem solving

Longer questions with several steps

17 120 students were asked how they travel to school. 25% walk and 3/10 come by bus. The rest come by car. [7]

(a) How many students walk?

(b) How many come by bus?

(c) How many come by car?

(d) What percent of the students come by car?

Answer

18 Laila has saved 48. This is 20% of the money she needs for a bike. [6]

(a) How much does the bike cost?

(b) How much more does she need to save?

(c) What percent of the cost does she still need?

Answer

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Mark scheme

For parents · give the marks shown; method marks can be given even if the final answer is wrong

Tip: Give method marks generously when the working shows the right idea. If a mistake early on is carried through correctly, give the later marks.

Q	Answer	Marks	How to award the marks
1	66%	1	
2	25%	1	
3	5%	1	
4	1/5	1	Must be simplified.
5	12	1	
6	72	1	
7	3	1	
8	35%	1	
9	60	1	
10	6/25	1	
11	272	2	1 mark for a correct method (e.g. 10% = 32, 5% = 16); 1 mark for the answer.
12	40%	2	1 mark for 14/35 written as a fraction or decimal; 1 mark for the percent.
13	120	3	1 mark for finding 1% or 10% (e.g. 10% = 12); 1 mark for scaling to 100%; 1 mark for the answer.
14	(a) 14.00 (b) 21.00	4	(a) 1 mark for method, 1 for the amount. (b) 1 mark for subtracting, 1 for the sale price.
15	30% (7/25 = 28%)	2	1 mark for changing to the same form; 1 mark for the correct choice.
16	192.00	4	1 mark for 10% = 16.00; 1 mark for the tip 32.00; 1 mark for adding; 1 mark for the total.
17	(a) 30 (b) 36 (c) 54 (d) 45%	7	(a) 2 marks (1 for method). (b) 1 mark. (c) 2 marks (1 for subtracting from the total). (d) 2 marks (1 for car ÷ total).
18	(a) 240 (b) 192 (c) 80%	6	(a) 3 marks (1 for finding a useful percent such as 1%, 10% or 25%, 1 for scaling, 1 for answer). (b) 1 mark. (c) 2 marks (1 for 100% − 20%).

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What to revise

Circle the questions your child lost marks on, then go back to the matching part of the pack

Questions	Skill	Revise in	✓ / ×
1	Percent means out of 100	Pack 1 · What Is a Percent?, Part 1	
2	Percents and decimals	Pack 1 · What Is a Percent?, Part 3	
3, 4	Percents and fractions	Pack 1 · What Is a Percent?, Part 2	
5, 6, 7	Benchmark percents	Pack 2 · Percent of a Number, Part 1	
8, 12	What percent is one number of another?	Pack 3 · Finding the Whole, Part 1	
9, 13	Finding the whole	Pack 3 · Finding the Whole, Part 2	
10, 15	Comparing and ordering	Pack 1 · What Is a Percent?, Part 4	
11, 16	Any percent of a number	Pack 2 · Percent of a Number, Part 2	
14	Discounts	Pack 2 · Percent of a Number, Part 4	
17	Percents in several steps	Pack 2 · Percent of a Number, Part 2 and Pack 3 · Finding the Whole, Part 1	
18	Finding the whole in a problem	Pack 3 · Finding the Whole, Part 2 and Part 4	

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