Year 6 maths: Big number calculations (Hard)

Maths · Number
Level: Hard

Student: _____ Date: _____

Instructions
- There are 10 questions. Read each one carefully.
- Write your answers on this paper. Use the space under a question to work it out.
- A grown-up can read a question aloud — that's fine.
- The answers are at the end. Check them together when you have finished.

Questions

1. Work out 506 384 + 397 718.

Circle one answer.

○ **A** 804102 ○ **B** 1004102 ○ **C** 904092 ○ **D** 904102

2. True or false: 450 008 − 219 376 = 230 632.

Circle one answer.

○ **A** True ○ **B** False

3. A barge carries 8.4 t of sand. 2 650 kg is unloaded. How many kilograms of sand are left?

Answer: _____ kg

Working:

4. A grain silo receives 14 t 850 kg of wheat on Monday and 9 t 475 kg on Tuesday. How many kilograms is that?

Answer: _____ kg

Working:

5. Work out 8 204 × 9.

Answer: ☐

Working:

6. A council had 324 500 dollars in its parks budget. It received 118 750 dollars more and spent 205 375 dollars on new swings. How many dollars are left?

Circle one answer.

○ **A** 443250 ○ **B** 375 ○ **C** 648625 ○ **D** 237875

7. Divide 1 295 by 8. Give the answer as a decimal.

Answer: ☐

Working:

8. A ship unloads 12.4 t, 8 650 kg and 3.075 t. What is the total mass in tonnes?

Circle one answer.

○ **A** 24.125 t ○ **B** 23.125 t ○ **C** 21.05 t ○ **D** 24.8 t

9. A prize pool of $2 160 000 is shared equally among 48 winners. How many dollars does each winner get?

Answer: $ ☐

Working:

10. 6 438 cards are shared equally among 6 children. How many cards does each child get?

Circle one answer.

○ **A** 173 ○ **B** 1 703 ○ **C** 1 037 ○ **D** 1 073

Answer key

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1. D — 904102

Ones: 4 + 8 = 12, write 2 and regroup 1. Tens: 8 + 1 + 1 = 10, write 0 and regroup 1. Hundreds: 3 + 7 + 1 = 11, write 1 and regroup 1. Thousands: 6 + 7 + 1 = 14, write 4 and regroup 1. Ten thousands: 0 + 9 + 1 = 10, write 0 and regroup 1. Hundred thousands: 5 + 3 + 1 = 9. 506 384 + 397 718 = 904 102.

2. A — True

Ones: 8 − 6 = 2. Tens: 0 is less than 7, so trade: 10 − 7 = 3. Hundreds: the 0 has to trade from the next place and passes down 9. 9 − 3 = 6. Thousands: the 0 has to trade from the next place and passes down 9. 9 − 9 = 0. Ten thousands: 4 − 1 = 3. Hundred thousands: 4 − 2 = 2. 450 008 − 219 376 = 230 632.

3. 5750 kg

8.4 t = 8 400 kg. 8 400 − 2 650 = 5 750 kg.

4. 24 325 kg

14 t 850 kg = 14 850 kg and 9 t 475 kg = 9 475 kg. 14 850 + 9 475 = 24 325 kg.

5. 73 836

Split into parts: 8 000 × 9 = 72 000; 200 × 9 = 1 800; 4 × 9 = 36. 72 000 + 1 800 + 36 = 73 836.

6. D — 237875

324 500 + 118 750 = 443 250. Then 443 250 − 205 375 = 237 875.

7. 161.875

1 295 ÷ 8 = 161 remainder 7. 7 ÷ 8 = 0.875. So 161.875.

8. A — 24.125 t

8 650 kg = 8.65 t. 12.4 + 8.65 + 3.075 = 24.125 t.

9. $45 000

2 160 000 ÷ 48 = 45 000. Check: 48 × 45 000 = 2 160 000.

10. D — 1 073

6 438 ÷ 6 = 1 073. The 4 hundreds make no full group of 6 after the thousand, so there is a 0 in the hundreds.