4.7 Fractions: Comparing, Adding and Subtracting: Test Pack

Calculators not allowed · about 55 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Which fraction is larger: 3/8 or 2/5? Write the fraction that is larger.

(1)

---

2 Work out each fraction of a number.

(a) What is 1/2 of 14? **(1)**

(b) What is 1/4 of 20? **(1)**

---

3 Reece eats 3/12 of a cake on Monday and 1/12 on Tuesday.

What fraction of the cake is left? Give your answer in its simplest form.

Answer: ___

(2)

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4 Work out 2 3/4 - 2 1/2.

Give your answer in its simplest form.

Answer: ___

(2)

---

5 Which fraction is equivalent to 1/4?

A: 4/17 B: 4/16 C: 5/8 D: 5/16

Write the letter.

Answer: ___

(1)

---

6 Work out 1 1/4 + 1 1/2.

Give your answer in its simplest form.

Answer: ___

(1)

---

7 Write 2 1/4 as an improper fraction.

(2)

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8 Work out 2/4 of 24 m.

Answer: ___

(1)

---

9 Work out 2 2/5 - 1 3/10. Give your answer as a mixed number in simplest form.

(3)

---

10 Liam says that to add 5/6 and 1/4 you add the numerators and add the denominators to get 6/10. Is Liam correct? Explain your answer.

(3)

---

11 Find the total of 1/3 + 1/4 + 1/6. Give your answer in simplest form.

(3)

---

12 Femi has 34 pebbles. Femi gives 1/2 of them to a friend.

How many pebbles does Femi give to the friend?

Answer: ___

(1)

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13 Sofia has 24 bricks. Sofia gives 3/4 of them to a friend.

How many bricks does Sofia give to the friend?

Answer: ___

(1)

---

14 Work out 3 1/2 + 2 1/2.

Give your answer in its simplest form.

Answer: ___

(2)

---

15 Work out 3 3/5 - 1 1/5.

Give your answer in its simplest form.

Answer: ___

(3)

---

16 Which fraction is equivalent to 5/8?

A: 15/24 B: 8/11 C: 15/25 D: 16/24

Write the letter.

Answer: ___

(1)

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17 Sofia says 6/9 is equal to 2/3. Is she correct? Explain in one sentence.

(2)

18 Write <, > or = in the box.

4/7 [ ] 5/12

Answer: ___

(1)

19 Which fraction is equivalent to 1/3?

A: 5/16 B: 5/15 C: 6/15 D: 6/8

Write the letter.

Answer: ___

(1)

20 Work out 2 1/6 - 1 1/2.

Give your answer in its simplest form.

Answer: ___

(2)

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21 Write these fractions in order, starting with the smallest.

1/4, 2/5, 2/4

Answer: ___

(2)

---

22 Add 3/5 and 1/10. Give your answer in its simplest form.

(2)

---

23 Work out 1/2 + 3/5.

Give your answer in its simplest form.

Answer: ___

(2)

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24 Write 20/3 as a mixed number.

Answer: ___

(1)

---

25 Which fraction is equivalent to 1/6?

A: 4/25 B: 5/24 C: 5/10 D: 4/24

Write the letter.

Answer: ___

(1)

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Mark scheme · 4.7 Fractions: Comparing, Adding and Subtracting: Test Pack

A correct answer earns full marks unless the question asks for working, a method, proof or explanation.

Question 1

2/5 cao **B1**

Answer: **2/5**

Question 2

(a) 7 cao **B1**

(a) Answer: **7**

(b) 5 cao **B1**

(b) Answer: **5**

Question 3

4/12 eaten seen **M1**

2/3 cao **A1**

Answer: **2/3**

Question 4

converts to a common denominator **M1**

1/4 cao **A1**

Answer: **1/4**

Question 5

B cao **B1**

Answer: **B**

Question 6

2 3/4 or 11/4 cao **B1**

Answer: **2 3/4**

Question 7

Multiplies whole number by denominator and adds numerator (2 x 4 + 1) **M1**

9/4 cao **B1**

Answer: **9/4**

Question 8

12 m cao **B1**

Answer: **12 m**

Question 9

Convert to improper fractions or to common denominator: 2 2/5 = 12/5, 1 3/10 = 13/10 **M1**

Convert both to denominator 10 and subtract (24/10 - 13/10 = 11/10) **M1**

1 1/10 cao **B1**

Answer: **1 1/10**

Question 10

Identifies error in method or shows correct approach is to use common denominator **M1**

Shows correct common denominator and adds correctly, e.g. 5/6 = 10/12, 1/4 = 3/12, sum = 13/12 **M1**

Conclusion that Liam is incorrect and correct sum is 13/12 or 1 1/12 cao **B1**

Answer: **No. Liam is incorrect. 5/6 + 1/4 = 10/12 + 3/12 = 13/12 = 1 1/12.**

Question 11

Find common denominator 12 and convert each fraction: 1/3 = 4/12, 1/4 = 3/12, 1/6 = 2/12 **M1**

Adds numerators correctly to get 9/12 **M1**

3/4 cao **B1**

Answer: **3/4**

Question 12

17 cao **B1**

Answer: **17**

Question 13

18 cao **B1**

Answer: **18**

Question 14

converts to a common denominator **M1**

6 cao **A1**

Answer: **6**

Question 15

converts to a common denominator **M1**

one correct fraction seen **M1**

2 2/5 or 12/5 cao **A1**

Answer: **2 2/5**

Question 16

A cao **B1**

Answer: **A**

Question 17

Shows multiplication or division to simplify 6/9 (for example divide numerator and denominator by 3) **M1**

Statement that 6/9 = 2/3 with correct reason, e.g. 6 ÷ 3 = 2 and 9 ÷ 3 = 3 **B1**

Answer: **Yes. 6/9 = 2/3 because 6 ÷ 3 = 2 and 9 ÷ 3 = 3.**

Question 18

> cao **B1**

Answer: **>**

Question 19

B cao **B1**

Answer: **B**

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Question 20

converts to a common denominator	**M1**
2/3 cao	**A1**

Answer: **2/3**

Question 21

converts to a common denominator or decimals	**M1**
1/4, 2/5, 2/4 cao	**A1**

Answer: **1/4, 2/5, 2/4**

Question 22

Convert to common denominator 10: 3/5 = 6/10, then add	**M1**
7/10 cao	**B1**

Answer: **7/10**

Question 23

converts to a common denominator	**M1**
1 1/10 or 11/10 cao	**A1**

Answer: **1 1/10**

Question 24

6 2/3 cao	**B1**

Answer: **6 2/3**

Question 25

D cao	**B1**

Answer: **D**

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