2.75 Comparing and Ordering Fractions, Decimals and Percentages: Test Pack

Total Marks

GL ASSESSMENT GL-11PLUS-MATHS · Calculators not allowed · about 35 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Which of these is the largest?

- ☐ A) 3/4
- ☐ B) 74%
- ☐ C) 0.749
- ☐ D) 0.8
- ☐ E) 75%

---

2 Which of these is the smallest?

- ☐ A) 7/20
- ☐ B) 0.28
- ☐ C) 0.36
- ☐ D) 2/5
- ☐ E) 3/10

---

3 Which of these is the smallest?

- ☐ A) 3/4
- ☐ B) 0.76
- ☐ C) 7/10
- ☐ D) 13/20
- ☐ E) 0.68

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4 Which of these is the largest?

- ☐ A) 3/10
- ☐ B) 1/4
- ☐ C) 0.15
- ☐ D) 0.35
- ☐ E) 0.32

---

5 Which of these is the largest?

- ☐ A) 3/5
- ☐ B) 0.64
- ☐ C) 68%
- ☐ D) 0.56
- ☐ E) 18/25

---

6 Which of these is the largest?

- ☐ A) 0.52
- ☐ B) 0.48
- ☐ C) 40%
- ☐ D) 0.44
- ☐ E) 0.375

---

7 Which of these is the largest?

- ☐ A) 0.36
- ☐ B) 0.28
- ☐ C) 12/25
- ☐ D) 45%
- ☐ E) 0.44

---

8 There are 30 pupils in a class. 12 are girls. Express the proportion of girls as a decimal and as a percentage.

(2)

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9 Which of these is the largest?

- [ ] A) 85%
- [ ] B) 17/25
- [ ] C) 0.84
- [ ] D) 0.625
- [ ] E) 64%

---

10 Which of these is the smallest?

- [ ] A) 48%
- [ ] B) 13/25
- [ ] C) 11/20
- [ ] D) 0.68
- [ ] E) 0.6

---

11 Which of these is the largest?

- [ ] A) 16%
- [ ] B) 30%
- [ ] C) 24%
- [ ] D) 36%
- [ ] E) 7/20

---

12 Which of these is the smallest?

- [ ] A) 90%
- [ ] B) 68%
- [ ] C) 92%
- [ ] D) 70%
- [ ] E) 7/8

---

13 Which of these is the largest?

- [ ] A) 48%
- [ ] B) 1/4
- [ ] C) 0.5
- [ ] D) 3/8
- [ ] E) 32%

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14 Write 7/20 as a percentage.

(1)

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15 Which of these is the smallest?

- ☐ A) 16%
- ☐ B) 20%
- ☐ C) 0.24
- ☐ D) 1/8
- ☐ E) 3/25

---

16 Which of these is the largest?

- ☐ A) 45%
- ☐ B) 0.5
- ☐ C) 3/5
- ☐ D) 56%
- ☐ E) 0.65

---

17 Choose the number that is not equal to the others.

(1)

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18 Which of these is the largest?

- ☐ A) 3/8
- ☐ B) 0.3
- ☐ C) 0.36
- ☐ D) 16%
- ☐ E) 7/25

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19 Which of these is the largest?

- [ ] A) 0.56
- [ ] B) 52%
- [ ] C) 7/10
- [ ] D) 5/8
- [ ] E) 12/25

---

20 Which of these is the largest?

- [ ] A) 35%
- [ ] B) 40%
- [ ] C) 0.48
- [ ] D) 25%
- [ ] E) 7/25

---

21 Which of these is the smallest?

- [ ] A) 36%
- [ ] B) 0.56
- [ ] C) 0.4
- [ ] D) 0.48
- [ ] E) 0.55

---

22 Which of these is the largest?

- [ ] A) 0.12
- [ ] B) 6/25
- [ ] C) 0.16
- [ ] D) 0.35
- [ ] E) 30%

---

23 Which of these is the largest?

- [ ] A) 85%
- [ ] B) 68%
- [ ] C) 92%
- [ ] D) 88%
- [ ] E) 4/5

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24 Which of these is the largest?

- ☐ A) 88%
- ☐ B) 0.7
- ☐ C) 0.85
- ☐ D) 3/4
- ☐ E) 17/25

---

25 One of these is not equal to the others. Identify which and explain briefly why: 3/10, 30%, 0.300, 31/101

(2)

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26 Sophie says that 3/8 is 40%. Is she correct? Show your working and state the correct percentage.

(3)

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27 Order these numbers from smallest to largest: 7/10, 0.705, 70.6%, 71/100

(3)

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28 A jumper costs £28.80. It is reduced by 15%. Work out the new price.

(2)

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Mark scheme · 2.75 Comparing and Ordering Fractions, Decimals and Percentages: Test Pack

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

Question 1

correct option D (0.8) cao **B1**

Answer: D) 0.8 (0.8 is the largest because 0.8 = 80%, greater than 75% or 0.75 etc.)

Question 2

correct option B (0.28) cao **B1**

Answer: B) 0.28

Question 3

correct option D (13/20) cao **B1**

Answer: D) 13/20

Question 4

correct option D (0.35) cao **B1**

Answer: D) 0.35

Question 5

correct option E (18/25) cao **B1**

Answer: E) 18/25

Question 6

correct option A (0.52) cao **B1**

Answer: A) 0.52

Question 7

correct option C (12/25) cao **B1**

Answer: C) 12/25

Question 8

Method to convert fraction 12/30 to decimal seen (12 ÷ 30 = 0.4) **M1**

0.4 and 40% cao **A1**

Answer: 0.4 and 40%

Question 9

correct option A (85%) cao **B1**

Answer: A) 85%

Question 10

correct option A (48%) cao **B1**

Answer: A) 48%

Question 11

correct option D (36%) cao **B1**

Answer: D) 36%

Question 12

correct option B (68%) cao **B1**

Answer: B) 68%

Question 13

correct option C (0.5) cao **B1**

Answer: C) 0.5

Question 14

35% cao **B1**

Answer: 35%

Question 15

correct option E (3/25) cao **B1**

Answer: E) 3/25

Question 16

correct option E (0.65) cao **B1**

Answer: E) 0.65

Question 17

correct option E (3/7) cao **B1**

Answer: E) 3/7 (0.428... not equal to 0.4)

Question 18

correct option A (3/8) cao **B1**

Answer: A) 3/8

Question 19

correct option C (7/10) cao **B1**

Answer: C) 7/10

Question 20

correct option C (0.48) cao **B1**

Answer: C) 0.48

Question 21

correct option A (36%) cao **B1**

Answer: A) 36%

Question 22

correct option D (0.35) cao **B1**

Answer: D) 0.35

Question 23

correct option C (92%) cao **B1**

Answer: C) 92%

Question 24

correct option A (88%) cao **B1**

Answer: A) 88%

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Question 25

Work shown to compare values (eg convert 31/101 to decimal 0.3069...)	**M1**
Correct identification and reason: 31/101 is not equal because it is about 0.307, others are 0.3 cao	**A1**

Answer: 31/101; it is approximately 0.3069 so not equal to 0.300

Question 26

Convert 3/8 to a decimal or percentage (eg 3 ÷ 8 = 0.375) or equivalent	**M1**
Multiply decimal by 100 or show percentage form (0.375 x 100 = 37.5%)	**M1**
Conclusion that Sophie is incorrect and 3/8 = 37.5% cao	**A1**

Answer: No. 3/8 = 0.375 = 37.5%

Question 27

Conversions for at least two values shown (eg 7/10 = 0.700, 71/100 = 0.71)	**M1**
Conversions for remaining values or equivalent comparisons	**M1**
Correct order: 7/10, 0.705, 70.6%, 71/100 cao	**A1**

Answer: 7/10 (0.700), 0.705, 70.6% (0.706), 71/100 (0.71)

Question 28

Method to find 15% of £28.80 seen (eg 10% = £2.88, 5% = £1.44 or 0.15 x 28.80)	**M1**
£24.48 cao	**A1**

Answer: £24.48

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