



1.8D Negative Numbers: Fluency and Exam Drill

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 40 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

1 Work out $-3 + 7$.

(Total for Question 1 is 1 mark)

2 Work out $5 + (-9)$.

(Total for Question 2 is 1 mark)

3 Work out $(-4) - 6$.

(Total for Question 3 is 1 mark)

4 Work out $2 - (-5)$.

(Total for Question 4 is 1 mark)

5 Work out $(-7) + (-8)$.

(Total for Question 5 is 1 mark)

6 Put these numbers in order from smallest to largest: $-3, 2, -8, 0$.

(Total for Question 6 is 1 mark)

7 Put these numbers in order from largest to smallest: -1, -6, 4, 0.

(Total for Question 7 is 1 mark)

8 The temperature at 6 am was -2 degrees C. By 9 am it had fallen by 5 degrees. Work out the temperature at 9 am.

(Total for Question 8 is 1 mark)

9 The temperature at midnight was -6 degrees C. By midday it had risen by 11 degrees. What was the temperature at midday?

(Total for Question 9 is 1 mark)

10 Work out $(-3) \times 4$.

(Total for Question 10 is 1 mark)

11 Work out $-12 \div 3$.

(Total for Question 11 is 1 mark)

12 Work out $(-3) \times (-5)$.

(Total for Question 12 is 1 mark)

13 Work out $-18 \div (-6)$.

(Total for Question 13 is 1 mark)

14 Calculate $(-4) \times 3 + 7$.

(Total for Question 14 is 2 marks)

15 Work out $5 - (-2) \times 3$. Use the correct order of operations.

(Total for Question 15 is 2 marks)

16 A thermometer shows morning -4 degrees C, afternoon 3 degrees C and evening -1 degrees C. Work out the difference between the highest and the lowest temperature that day.

(Total for Question 16 is 2 marks)

17 Kwame has a bank balance of -28 pounds. He pays in 50 pounds and then a direct debit of 17 pounds is taken. What is his final balance?

(Total for Question 17 is 3 marks)

18 This question has three parts. Follow the instructions in each part.

(a) Evaluate $(-3)(4 - 9)$. (2)

(b) Hence or otherwise evaluate $15 + (-12) / 4$. (2)

(c) Write your answer from part (b) as an integer. State whether this integer is positive, negative or zero. (2)

(Total for Question 18 is 6 marks)

Mark scheme · 1.8D Negative Numbers: Fluency and Exam Drill

Question 1

- **B1** 4 cao
- **Answer:** 4

Question 2

- **B1** -4 cao
- **Answer:** -4

Question 3

- **B1** -10 cao
- **Answer:** -10

Question 4

- **B1** 7 cao
- **Answer:** 7

Question 5

- **B1** -15 cao
- **Answer:** -15

Question 6

- **B1** -8, -3, 0, 2 cao
- **Answer:** -8, -3, 0, 2

Question 7

- **B1** 4, 0, -1, -6 cao
- **Answer:** 4, 0, -1, -6

Question 8

- **B1** -7 degrees C cao
- **Answer:** -7 degrees C

Question 9

- **B1** 5 degrees C cao
- **Answer:** 5 degrees C

Question 10

- **B1** -12 cao
- **Answer:** -12

Question 11

- **B1** -4 cao
- **Answer:** -4

Question 12

- **B1** 15 cao
- **Answer:** 15

Question 13

- **B1** 3 cao
- **Answer:** 3

Question 14

- **M1** multiply $(-4) \times 3$ to get -12 or show method oe
- **A1** -5 cao
- **Answer: -5**

Question 15

- **M1** correct method: $(-2) \times 3 = -6$ and then $5 - (-6)$ oe
- **A1** 11 cao
- **Answer: 11**

Question 16

- **M1** identify highest = 3 and lowest = -4 and form $3 - (-4)$ oe
- **A1** 7 degrees C cao
- **Answer: 7 degrees C**

Question 17

- **M1** correctly add deposit: $-28 + 50$ seen or stated
- **M1** correctly subtract the direct debit: $(-28 + 50) - 17$ or equivalent ft
- **A1** 5 pounds cao
- **Answer: 5 pounds**

Question 18

- (a) **M1** work shown: $4 - 9 = -5$ or equivalent method
- (a) **A1** 15 cao
- **(a) Answer: 15**
- (b) **M1** division done: $(-12) / 4 = -3$ or equivalent
- (b) **A1** 12 cao
- **(b) Answer: 12**
- (c) **B1** 12 cao
- (c) **B1** statement that 12 is positive, with brief reason (e.g. greater than 0) oe
- **(c) Answer: 12; positive**