



2.9D Solving One Step Equations: Fluency and Exam Drill

EDEXCEL Edexcel 1MA1 · Calculator allowed · about 30 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

1 Solve $x + 7 = 12$.

(Total for Question 1 is 1 mark)

2 Solve $y - 5 = 9$.

(Total for Question 2 is 1 mark)

3 Solve $3x = 15$.

(Total for Question 3 is 1 mark)

4 Solve $x/4 = 3$.

(Total for Question 4 is 1 mark)

5 Solve $t - 8 = 2$.

(Total for Question 5 is 1 mark)

6 Solve $-3k = 18$.

(Total for Question 6 is 1 mark)

7 Solve $x/5 = -6$.

(Total for Question 7 is 1 mark)

8 Solve $2x = 7$. Give the exact value of x .

(Total for Question 8 is 2 marks)

9 Solve $(1/3)p = 4$.

(Total for Question 9 is 1 mark)

10 Solve $x + 3.5 = 7.2$.

(Total for Question 10 is 1 mark)

11 Solve $0.25m = 1.5$. Show your method.

(Total for Question 11 is 2 marks)

12 Solve $5 + n = -2$.

(Total for Question 12 is 1 mark)

13 Solve $-4x = -10$. Give your answer as a fraction in lowest terms.

(Total for Question 13 is 2 marks)

14 Solve $x / 0.2 = 15$.

(Total for Question 14 is 1 mark)

15 Solve $7 = y / (-3)$.

(Total for Question 15 is 1 mark)

16 Solve $(1/2)k = -3$.

(Total for Question 16 is 1 mark)

17 Solve $-(1/3)a = 9$. (Multiply both sides to isolate a.)

(Total for Question 17 is 2 marks)

18 Solve each of the following. Give exact answers where appropriate.

a) $4x = 9$

b) $x/6 = 2.5$

c) $-2y = 7$

(a) $4x = 9$ (1)

(b) $x/6 = 2.5$ (1)

(c) $-2y = 7$ (1)

(Total for Question 18 is 3 marks)

19 Solve $(\frac{3}{4})x = 9$. Show your method and give the exact value of x .

(Total for Question 19 is 2 marks)

20 Solve $5 = -x/2$. Give your answer exactly.

(Total for Question 20 is 2 marks)

Mark scheme · 2.9D Solving One Step Equations: Fluency and Exam Drill

Question 1

- **B1** $x = 5$ cao
- **Answer:** 5

Question 2

- **B1** $y = 14$ cao
- **Answer:** 14

Question 3

- **B1** $x = 5$ cao
- **Answer:** 5

Question 4

- **B1** $x = 12$ cao
- **Answer:** 12

Question 5

- **B1** $t = 10$ cao
- **Answer:** 10

Question 6

- **B1** $k = -6$ cao
- **Answer:** -6

Question 7

- **B1** $x = -30$ cao
- **Answer:** -30

Question 8

- **M1** divide both sides by 2 or show $2x/2 = 7/2$
- **A1** $x = 7/2$ cao
- **Answer:** $7/2$

Question 9

- **B1** $p = 12$ cao
- **Answer:** 12

Question 10

- **B1** $x = 3.7$ cao
- **Answer:** 3.7

Question 11

- **M1** multiply or divide: $m = 1.5 / 0.25$ or show $0.25m/0.25 = 1.5/0.25$
- **A1** $m = 6$ cao
- **Answer:** 6

Question 12

- **B1** $n = -7$ cao
- **Answer:** -7

Question 13

- **M1** divide both sides by -4 or equivalent method
- **A1** $x = 5/2$ cao
- **Answer:** $5/2$

Question 14

- **B1** $x = 3$ cao
- **Answer:** 3

Question 15

- **B1** $y = -21$ cao
- **Answer:** -21

Question 16

- **B1** $k = -6$ cao
- **Answer:** -6

Question 17

- **M1** multiply both sides by -3 or show $(-1/3)a * -3 = 9 * -3$
- **A1** $a = -27$ cao
- **Answer:** -27

Question 18

- (a) **B1** $x = 9/4$ cao
- (a) **Answer:** $9/4$
- (b) **B1** $x = 15$ cao
- (b) **Answer:** 15
- (c) **B1** $y = -7/2$ cao
- (c) **Answer:** $-7/2$

Question 19

- **M1** multiply both sides by $4/3$ or show $x = 9 * (4/3)$
- **A1** $x = 12$ cao
- **Answer:** 12

Question 20

- **M1** multiply both sides by -2 or show $-x/2 * -2 = 5 * -2$
- **A1** $x = -10$ cao
- **Answer:** -10