HIGHER

6.6 Parallel and Perpendicular Lines: 10-minute Pack

Total Marks

EDEXCEL 1MA1 · Calculator allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 A line has equation $y = -2x + 7$.

(a) Write down the gradient of the line. **(1)**

.....

(b) Write down the coordinates of the point where the line crosses the y-axis. **(1)**

.....

(Total for Question 1 is 2 marks)

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2 A line has equation $2y = 6x - 4$.

(a) Rearrange the equation into the form $y = mx + c$. **(1)**

(b) State the gradient of the line. **(1)**

(Total for Question 2 is 2 marks)

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3 Find the equation of the line that is parallel to $y = 3x + 2$ and passes through the point $(0, -4)$.
Give your answer in the form $y = mx + c$.

(Total for Question 3 is 2 marks)

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4 Which of these lines is parallel to y = 5 - 3x?

- ☐ A) y = 3x + 5
- ☐ B) y = -3x + 2
- ☐ C) y = (1/3)x - 5
- ☐ D) y = 3x - 5

(Total for Question 4 is 1 mark)

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5 Write down the gradient of a line that is perpendicular to the line y = -3x.

(Total for Question 5 is 2 marks)

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Mark scheme · 6.6 Parallel and Perpendicular Lines: 10-minute Pack

Question 1

(a) -2 cao **B1**

(a) Answer: -2

(b) (0, 7) cao **B1**

(b) Answer: (0, 7)

Question 2

(a) y = 3x - 2 oe **B1**

(a) Answer: y = 3x - 2

(b) 3 ft from part (a) **B1**

(b) Answer: 3

Question 3

gradient = 3 stated or used (parallel lines have equal gradient) **M1**

y = 3x - 4 oe cao **A1**

Answer: y = 3x - 4

Question 4

B selected (cao) **B1**

Answer: B (y = -3x + 2)

Question 5

gradient of the line = -3 found **M1**

1/3 oe **A1**

Answer: 1/3

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