

MTH-3017

Pretest DE

©Doug Simms 2011

www.thefreemathtutor.com

1. Graph the straight line that goes through the point $P(0, 0)$ and has a slope of $\frac{-3}{4}$. Identify two points on the line. (4 marks)
2. Graph the following equation. Identify three points, including all intercepts, in a table of values, and label three points on the graph. (10 marks)

$$0.2x = 0.3y$$

3. Find the slope of the line that goes through the points $(-4, 0)$ and $(1, 4)$. (4 marks)
4. Using the form $Ax + By + C = 0$ and the formula $m = \frac{-A}{B}$, find the slope of the following straight line equation. (4 marks)

$$-9 = x$$

5. Graph the following equation. Identify three points, including all intercepts, in a table of values, and label three points on the graph. (10 marks)

$$3x = 4x - 3$$

6. Solve with a graph. Indicate the scale chosen. (10 marks)

9 days after the last snowfall in the spring, my grass is 2.5cm in height. 7 days later it was 9cm in height. If a straight line equation applies to this situation, how tall was the grass 13 days after the last snowfall?

7. Using the form $y = mx + b$, identify the slope and y-intercept of the following straight line equation. (2 marks)

$$-6y = 4 - 8y$$

MTH-3017

Pretest DE

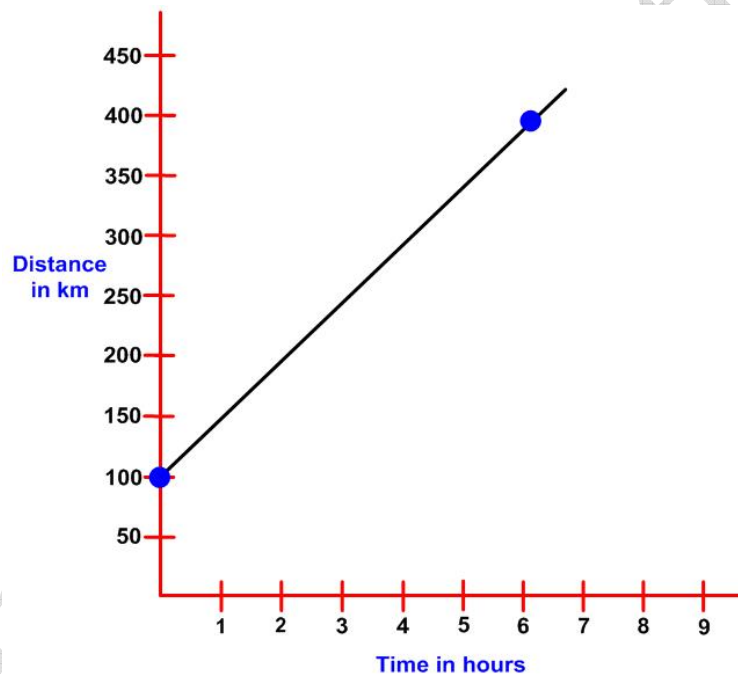
©Doug Simms 2011

www.thefreemathtutor.com

8. Graph the following equation. Identify three points, including all intercepts, in a table of values, and label three points on the graph. (10 marks)

$$\frac{3y}{4} = 0.5x - 1.2$$

9. For the following graph, give the slope with its unit of measure. (4 marks)



10. Derive the equation of a straight line that passes through the points (8 , 2.5) and (-3 , 2.5) Express the equation in either the $Ax + By + C = 0$ format or in the $y = mx + b$ format. (10 marks)

11. Solve with a graph. Indicate the scale chosen. (10 marks)

A plumber charges \$46 for 30 minutes of work, and \$183 for 2 hours of work. If a straight line equation applies to this situation, how much does he charge for 1 hour and 45 minutes of work?

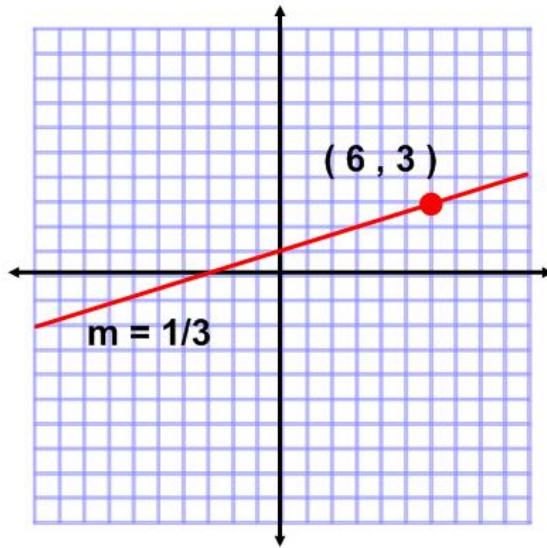
MTH-3017

Pretest DE

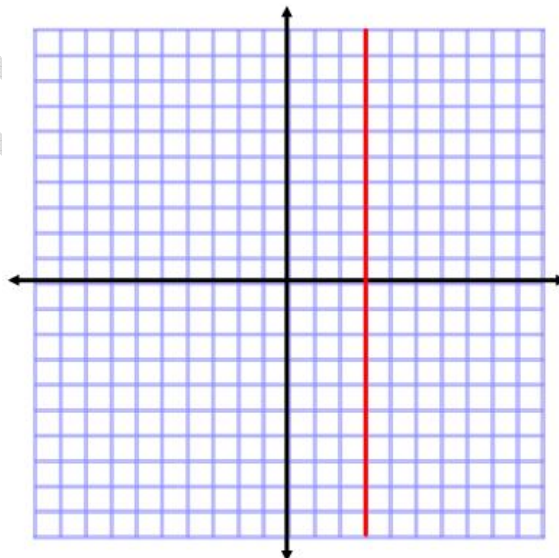
©Doug Simms 2011

www.thefreemathtutor.com

12. Derive the equation of the following straight line. Express the equation in either the $y=mx+b$ format or the $Ax+By+C=0$ format. (10 marks)



13. For the following graph, state whether its slope is positive, negative, equal to zero or undefined. Then state whether the line is increasing, decreasing, horizontal or vertical. (2 marks)



MTH-3017

Pretest DE

©Doug Simms 2011

www.thefreemathtutor.com

14. Derive the equation of the following straight line. Express the equation in either the $y=mx+b$ format or the $Ax+By+C=0$ format. (10 marks)

