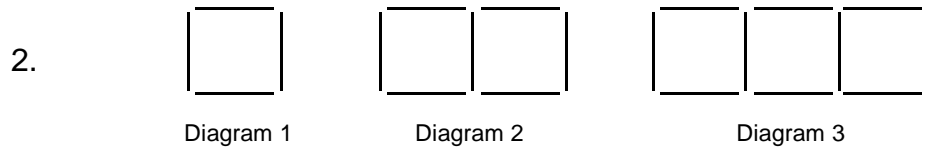


EXAM REVIEW GRADE 9
Unit 4 – Linear Relations

Name: _____ Class: _____

1. In the equation $m = 3n - 2$, determine the value of m when $n = 5$.



- a) Determine the expression that relates the number of toothpicks (t) to the diagram number (d).
- b) Given the diagrams shown, how many toothpicks would be used to construct Diagram 15?

3. Explain which table of values represents a linear relation?

x	0	1	2	3	4
y	2	4	6	4	2

x	0	1	2	3	4
y	3	1	-1	-3	-5

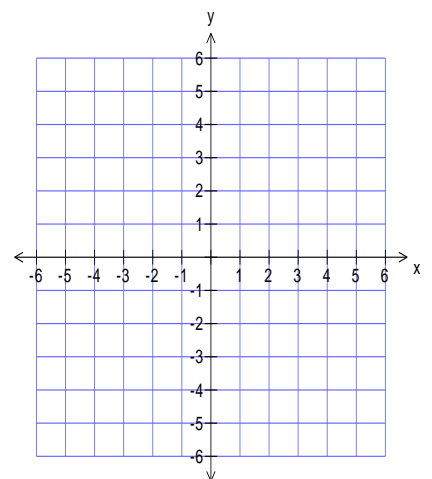
x	0	1	2	3	4
y	2	5	8	11	14

x	0	1	2	3	4
y	2	4	7	11	16

4. The fee to ride in King Taxi is \$4 plus \$1.25 for each km travelled. Determine the equation that relates the total cost C to the distance travelled d .

5. Use the grid to draw the lines :

- a) $y + 4 = 0$
b) $x = 5$

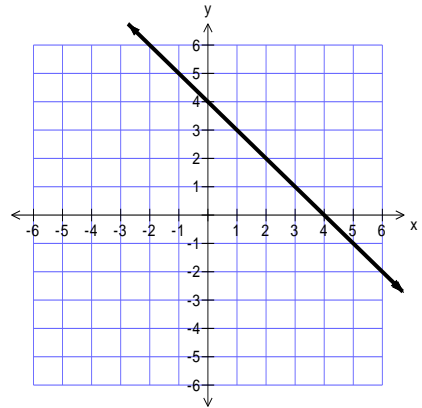


EXAM REVIEW GRADE 9
Unit 4 – Linear Relations

Name: _____ Class: _____

6. A stone is dropped from a bridge. Its speed increases due to the force of gravity. If the speed, s in m/s, after t second is given by the formula $s = 9.8t + 3$, what is the speed of the stone at 5 seconds?

7. The graph shown represents a linear relation. Determine the value of y when $x = 6$.



8. Complete each table of values.

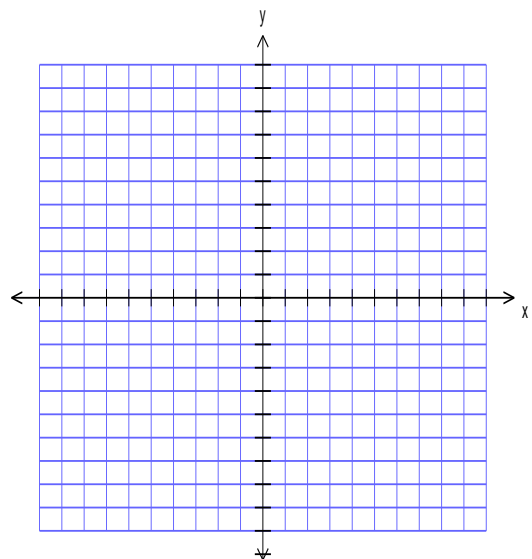
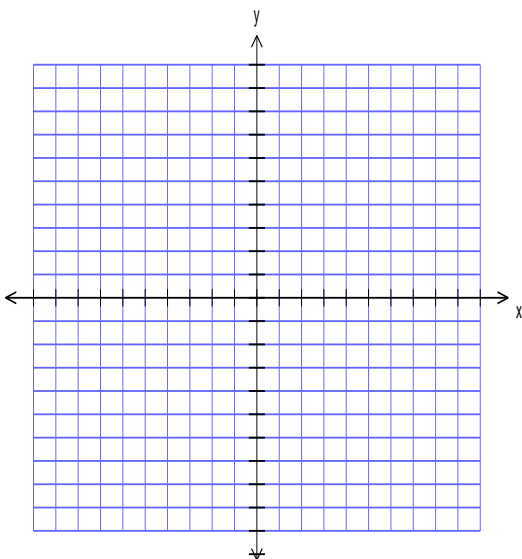
a) $y = 2x + 4$

X	Y
-1	
0	
1	
2	

b) $2x + y = -1$

X	Y
-1	
0	
1	
2	

9. Graph your equations above on the grids provided:



10. What value of x will make $y = -32$ for the equation $y = 4x - 12$?