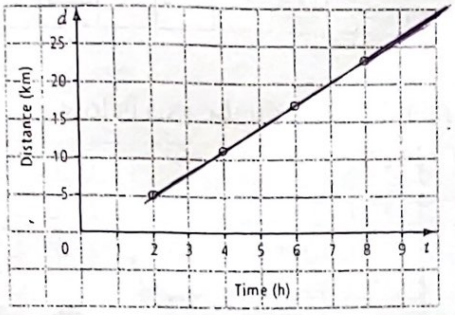
Reading Graphs Worksheet Math 9 Name: Key

1. The graph show a linear relationship between distance and time



a) What is the approximate value of distance when

t = 5 d ≈ 14 km

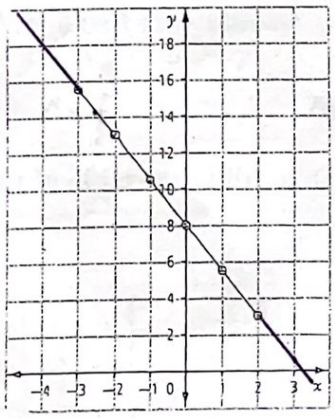
t = 9 d ≈ 26 km

b) What is the approximate value of time when

d = 15 t ≈ 5.2 h

d = 25 t = 8.6 h

2) Use the graph below to a



a) approximate y if

x = -2.5 y ≈ 14.5

x = -4 y ≈ 18

x = 3 y ≈ 0.8

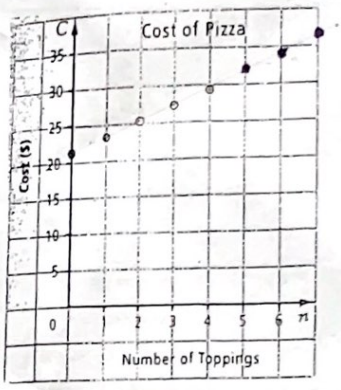
b) approximate x if

y = 12 x ≈ 1.6

y = 4 x ≈ 1.7

y = 18 x ≈ -4

3) A cheese pizza costs $21.25. The graph shows the cost of adding additional toppings



What is the approximate cost of a pizza with

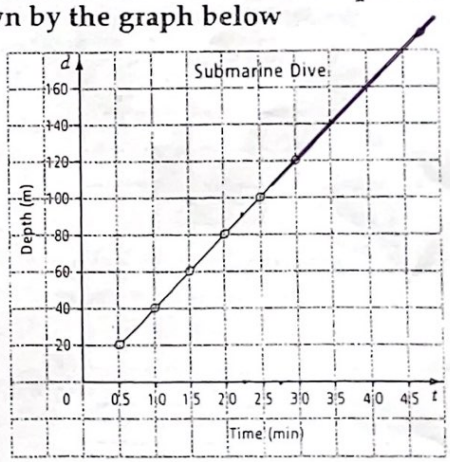
a) 5 toppings C ≈ $32

b) 6 toppings C ≈ $34

c) Why is the graph NOT connected with a straight line?

You need a whole number of toppings

4) A submarine can dive to a depth of 200m as shown by the graph below



a) How long does it take to dive

90 m 2.25 min

140 m 3.5 min

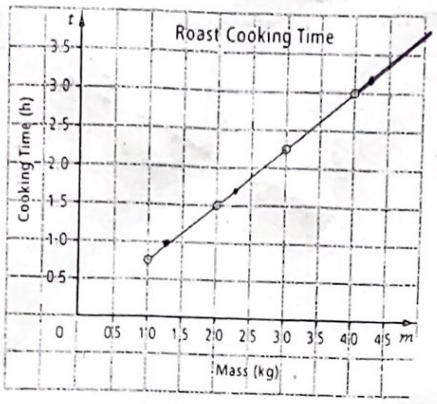
170 m 4.6 min

b) How deep is the sub after

3.25 mins 130 m

4.75 mins 180 m

5) **The cooking time of a roast depends on its mass as shown by the relationship below**



From the graph, determine the cooking time of each of the following roasts

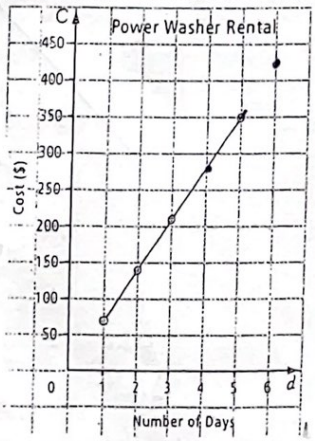
a) 1.25 kg b) 2.25 kg c) 4.2kg

1h 1.75 h 3.2h

In which of the roast questions above did you extrapolate?

(C)

6) **The graph below represents the relationship between the Cost of renting a power washer and the rental time**



a) How much does it cost to rent the washer for 4 days?

$280

b) What is the cost per day?

$70

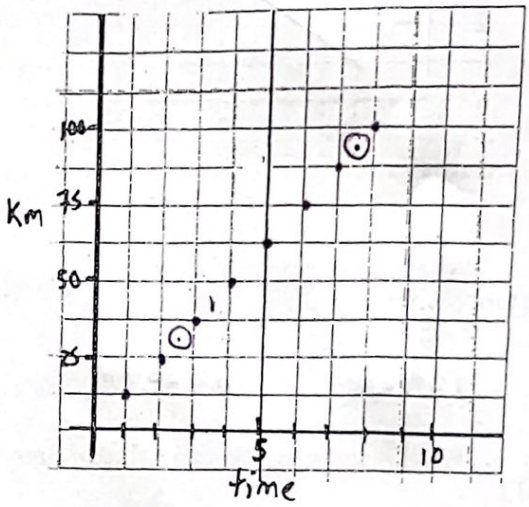
c) With $425, how long could you rent it ?

6 days

6) The table shows the distance that Bert cycles in relation to time

Time, t (h)	1	2	3	4	5	6
Distance, d (km)	12.5	25	37.5	50	62.5	75

a) Plot this data on the axis below



b) How long has Bert cycles in

i) 2.5 hours ii) 7.5 hours

31.25 Km 81.25 Km

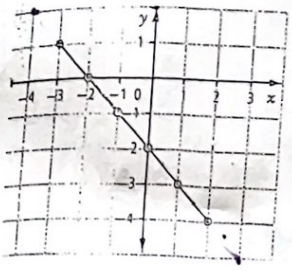
c) How long would it take Bert to cycle

i) 44 km ii) 90 km

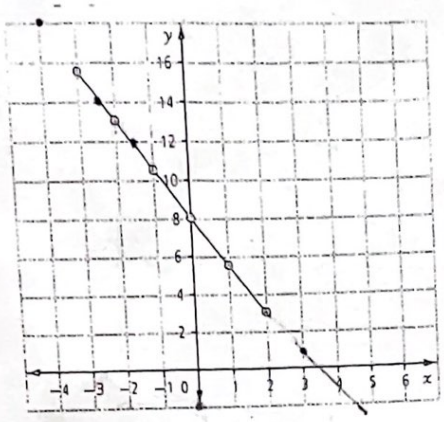
3.5h 7.2h

7) **Use the graph to fill in the table of values**

x	y
1.5	-3.5
2.5	-4.5
-4	2
0.5	-2.5
3	-5
-4	2

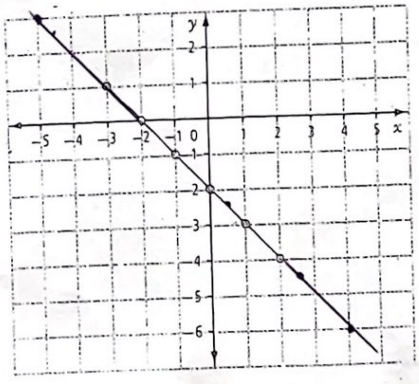


8) Use the graph to fill in the table of values



x	-2.5	3	-1.5	4.5	-4
y	14	1	12	-2	18

9) Use the graph to fill in the table of values

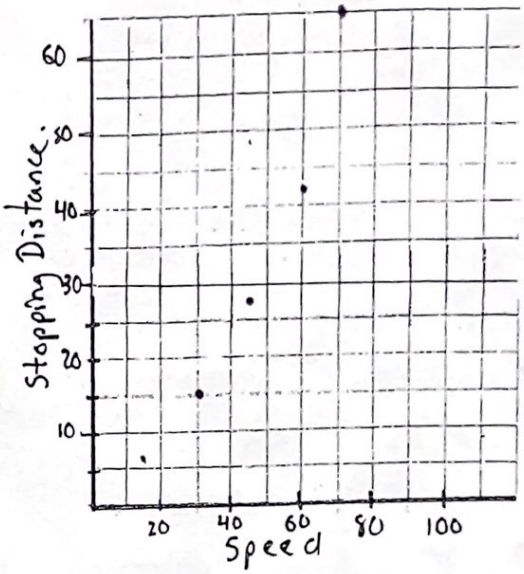


x	0.5	-5	4	-5	2.5
y	-2.5	3	-6	3	-4.5

The table shows the relationship between stopping distance and the speed of a vehicle

Speed, s (km/h)	15	30	45	60	75
Stopping Distance, d (m)	6	15	28	42	65

a) Plot this data on the axis below



b) Estimate the stopping distances for the following speeds

i) 5 km/h ii) 55 km./h iii) 80 km/h

4 m 34m

c) What speed was the car going if the stopping distance was

i) 10 m ii) 50 m

25 km/h 32 km/h

d) How much further is the stopping distance for 50 km/h to that of 30 km/h

~~what about 70km/h to 50 km/h~~

e) Why is the graph not a straight line?

Not a lin. relation