T4-07 Number _____ Name _____ Key _____ Period _____

The ratio of boys to girls in a math class is 3:6.

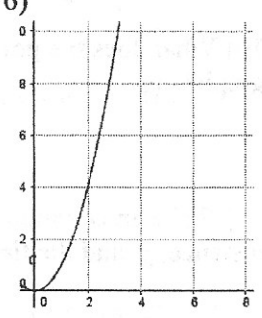1) Complete the table for the different amounts of boys and girls.

| Boys	3	6	8	10	12
Girls	6	12	~~14~~ 16	20	24

2) Determine the constant of proportionality from the table in question 1.

$$K = 2 \quad \text{or} \quad K = \frac{1}{2}$$

Identify whether each representation is proportional or not. For each table/graph that is proportional, write the equation in $y = kx$ form. For each table/graph that is not proportional, explain why not.

3) $y = 4x + 3$	4) Jordan receives $10 every time he walks his neighbor's dog. Is the total amount of money he earns proportional to the number of times he walks the dog?	5) <table><tr><td>x</td><td>y</td></tr><tr><td>1</td><td>4</td></tr><tr><td>2</td><td>8</td></tr><tr><td>3</td><td>12</td></tr><tr><td>4</td><td>16</td></tr><tr><td>5</td><td>20</td></tr></table>	6)
If yes, k = Equation:	If yes, k = 10 Equation: $y = 10x$	If yes, k = 4 Equation: $y = 4x$	If yes, k = Equation:
If no, explain why NO, doesn't look like $y = kx$. It has something added on.	If no, explain why	If no, explain why	If no, explain why NO, not a straight line

7) Write an equation for the following diagram:

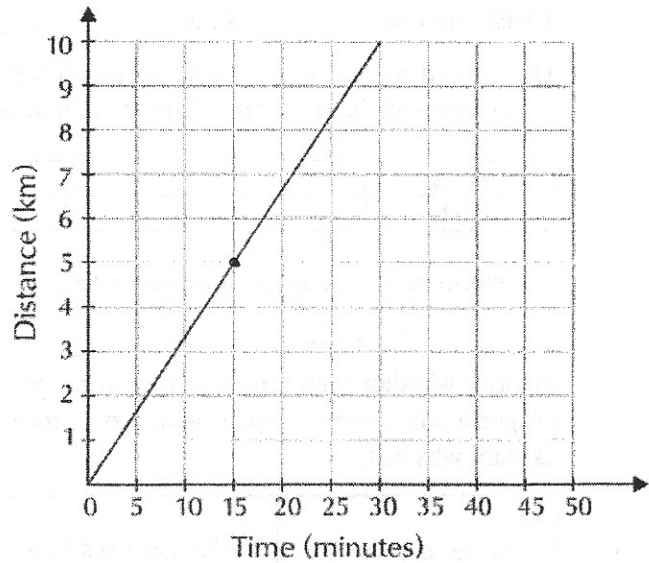Stage 1   Stage 2   Stage 3
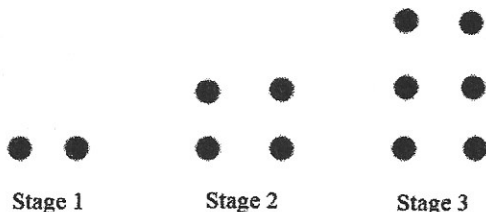
Equation: $y = 2x$

Use the following graph to answer the questions.

8) What is the constant of proportionality and what does it represent in this context?

$K = \frac{1}{5}$ or 0.2

In 1 minute, You can go 0.2 ~~miles~~ Km
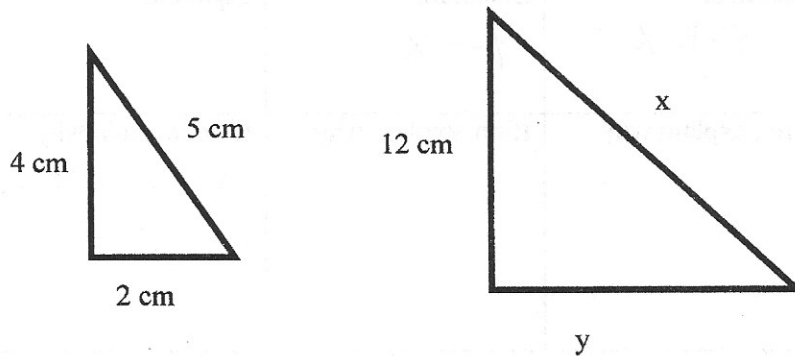
9) What distance would you be at in 45 minutes?

~~9miles~~ 9 Km

10) What does the point (15, 5) mean in the graph? At 15 minutes, you are at 5Km

11) Write an equation for this relationship between distance, y, and the time, x.

$Y = 0.2 x$

Use the proportional triangles below to answer the following questions

Distance (km) vs Time (minutes) graph

12) What is the length of side x?

15 cm

13) What is the length of side y?

6 cm