

# Graphing Unit Rates

7<sup>th</sup> Grade Math

Name Key

Answer the following questions.

1. A student pays \$12.50 for 10 headbands.

a) What is the unit rate?

$\frac{\$1.25}{\text{headband}}$

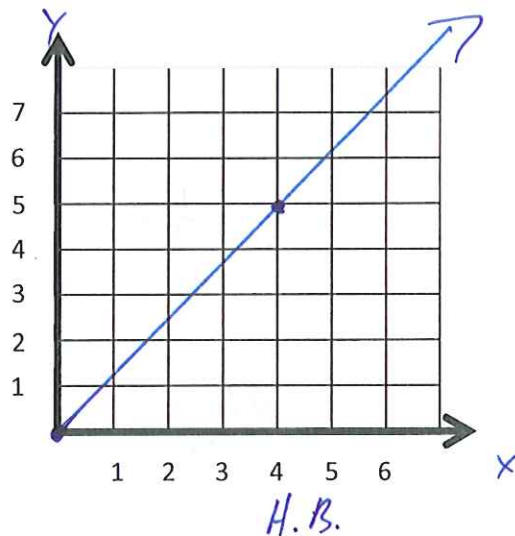
b) Complete the table.

x (H.B.)	y (\$)
0	0
1	1.25
2	2.5
3	3.75
4	5
5	6.25
6	7.5

c) Graph the unit rate by using the table.

d) Write an equation for the graph.

$$y = 1.25x$$



2. A soccer player runs a total of 12 miles during a 4 hour game.

a) What is the unit rate?

$\frac{3 \text{ mi}}{\text{hr}}$

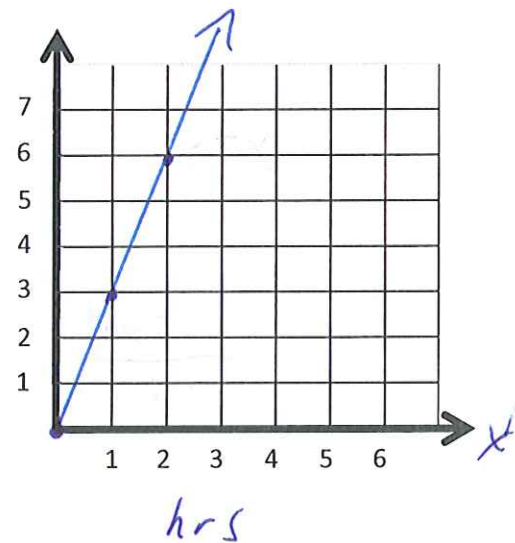
b) Complete the table.

x (hrs)	y (mi)
0	0
1	3
2	6
3	9
4	12
5	15
6	18

c) Graph the unit rate by using the table.

d) Write an equation for the graph.

$$y = 3x$$



3. A junior high student drinks 10 gallons of milk every 20 weeks.

a) What is the unit rate?

$$\frac{.5 \text{ gal}}{\text{wk}}$$

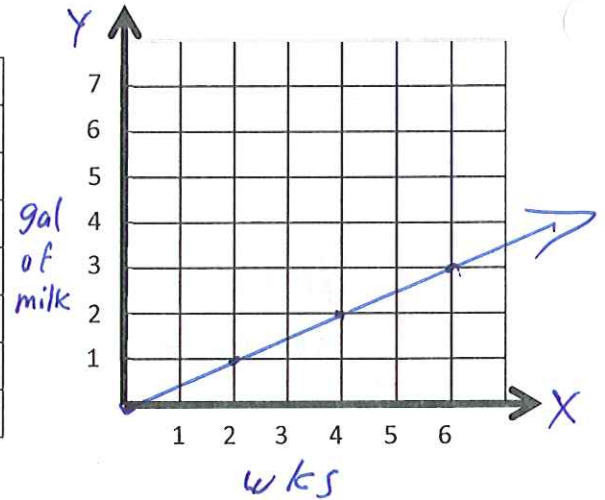
b) Complete the table.

x (wks)	y (gal)
0	0
1	.5
2	1
3	1.5
4	2
5	2.5
6	3.

c) Graph the unit rate by using the table.

d) Write an equation for the graph.

$$y = \frac{1}{2}x$$



4. It costs \$50 for 50 itunes songs.

a) What is the unit rate?

$$\frac{\$1}{\text{song}}$$

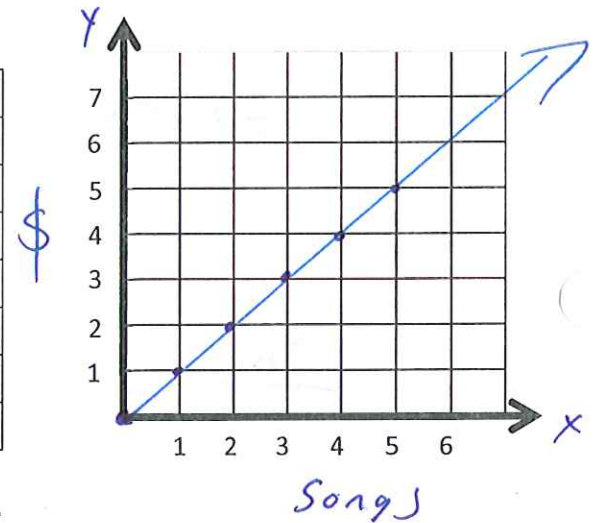
b) Complete the table.

X (songs)	y (\$)
0	0
1	1
2	2
3	3
4	4
5	5
6	6

c) Graph the unit rate by using the table.

d) Write an equation for the graph.

$$y = x$$



5. A Hummer uses 20 gallons of gas to travel 80 miles.

a) What is the unit rate?

$$\frac{.25 \text{ gal}}{\text{mi}}$$

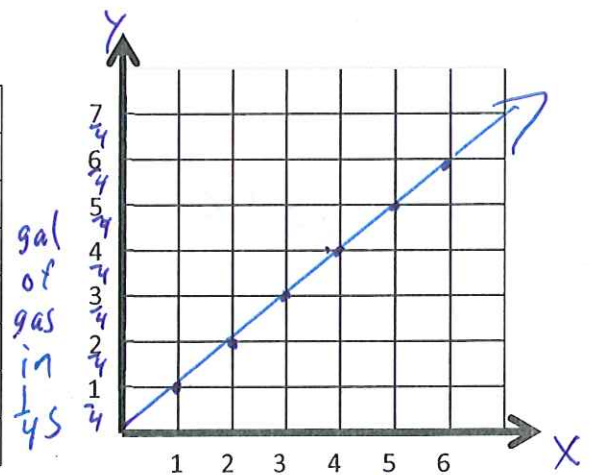
b) Complete the table.

x (mi)	y (gal)
0	0
1	.25
2	.5
3	.75
4	1
5	1.25
6	1.5

c) Graph the unit rate by using the table.

d) Write an equation for the graph.

$$y = \frac{1}{4}x$$



6. What point (ordered pair) does every table and graph above share?

$(0,0)$  the origin.