

Aim: How can we practice with tables and graphs in proportional relationships?

Do Now:

Fill in the blanks for each table below based on the information given. Then, state whether the relationship is proportional or not.

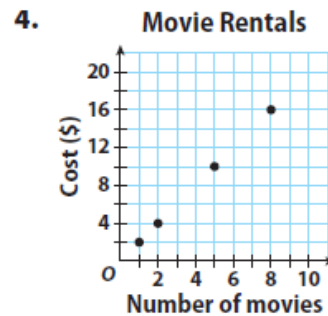
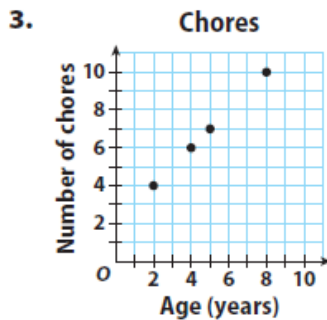
1. A student reads 65 pages per hour.

Time (h)	3	5		10
Pages			585	

2. A babysitter makes \$7.50 per hour.

Time (h)	2		5	
Pages		22.50		60

For each graph below, state whether the relationship in the graph is proportional or not. If proportional, state the constant of proportionality.

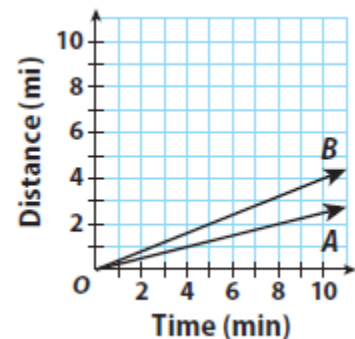


The graph below shows the relationship between time and distance for two horses: A and B.

5. What is the meaning of the point (0,0) in the context of this problem?

6. How long does it take each horse to run a mile?

7. Who is the faster horse? What do you notice about the line of the faster horse?



8. Draw a line on the graph for a horse that is faster than both A and B.

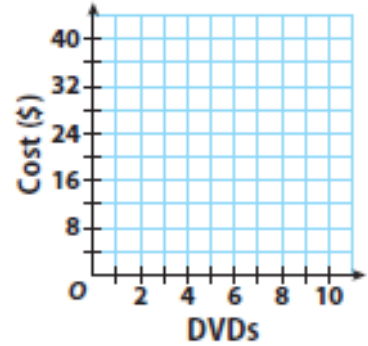
9. At each of their given rates, how far would each horse run in 12 minutes?

Bargain DVDs cost \$5.00 each at Mega Movie Store. Create a table showing the relationship between the number of DVDs rented and the number of dollars (\$) spent.

DVDs	0	2	4	6	8
Cost (\$)					

10. Graph the table on the graph provided.

11. Give one ordered pair on the graph and explain its meaning within the context of this problem.

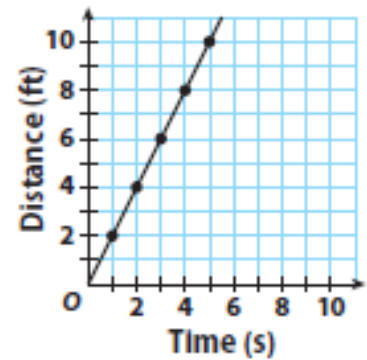


The graph to the right shows the relationship between distance and time as Glenda swims.

12. How far did Glenda swim in 4 seconds?

13. Is this a proportional relationship? How do you know?

14. What is the constant of proportionality?



15. Given the three tables below, which car is not traveling at a constant speed?

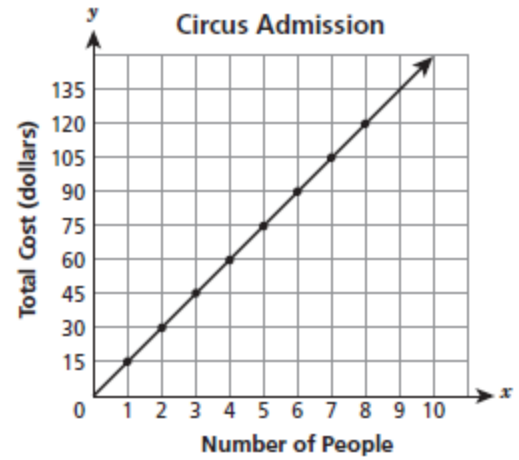
Car 1		Car 2		Car 3	
Time (h)	Distance (mi)	Time (h)	Distance (mi)	Time (h)	Distance (mi)
0	0	0	0	0	0
2	120	5	200	1	65
3	180	10	400	2	85
5	300	15	600	3	105
6	360	20	800	4	125

16. Two friends worked out on treadmills at the gym. Who walked at a faster rate?

Alden walked 2 miles in $\frac{3}{4}$ hour.

Kira walked $1\frac{3}{4}$ miles in 30 minutes.

17. The graph shows the relationship between the number of people and the total cost of admission tickets for a circus.



Which point on the graph represents the unit rate?

- A. (0,0) B. (1,15) C. (15,1) D. (8, 120)

18. Jocelyn was shopping at a farmer's market. She observed the prices of cucumbers at several stands. Which sign shows a proportional relationship in the pricing of cucumbers?

Joe's Stand	
5 cucumbers for \$2.50	
10 cucumbers for \$4.00	
15 cucumbers for \$5.50	
20 cucumbers for \$7.00	

Betty's Stand	
5 cucumbers for \$2.00	
10 cucumbers for \$4.00	
15 cucumbers for \$6.00	
20 cucumbers for \$8.00	

Steve's Stand	
5 cucumbers for \$2.50	
10 cucumbers for \$4.50	
15 cucumbers for \$6.50	
20 cucumbers for \$8.50	

Lula's Stand	
5 cucumbers for \$1.50	
10 cucumbers for \$3.00	
15 cucumbers for \$6.00	
20 cucumbers for \$12.00	

19. A crew of highway workers paved $\frac{2}{15}$ mile in 20 minutes. If they work at the same rate, what portion of a mile will they pave in one hour?

- A. $\frac{1}{150}$ B. $\frac{2}{45}$ C. $\frac{2}{5}$ D. $\frac{5}{2}$

20. A recipe requires $\frac{1}{3}$ cup of milk for each $\frac{1}{4}$ cup of water. How many cups of water are needed for each cup of milk?

- A. $\frac{1}{12}$ B. $\frac{3}{4}$ C. $\frac{11}{12}$ D. $1\frac{1}{3}$