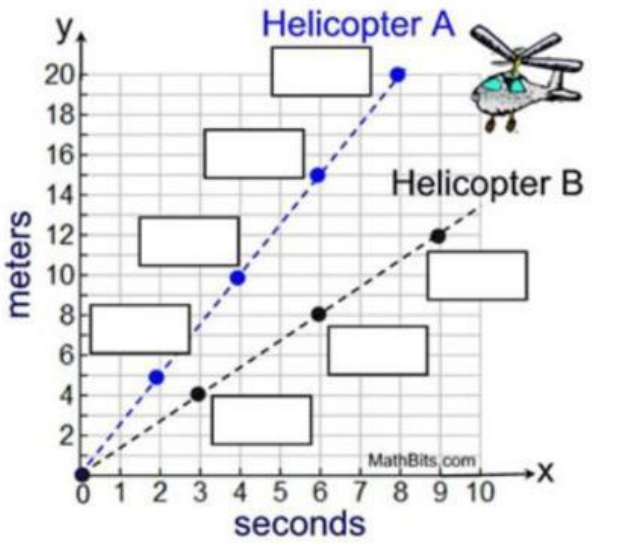
PROPORTIONAL RELATIONSHIPS
WORKSHEET – II

- ✓ Two model helicopters take off at the same time. Helicopter A rises 5 meters every 2 seconds. Helicopter B rises 4 meters every 3 seconds
  a) Fill in the missing ordered pairs on the coordinate graph for each helicopter.



  b) Does the rise of each helicopter represent a proportional relationship? Explain.

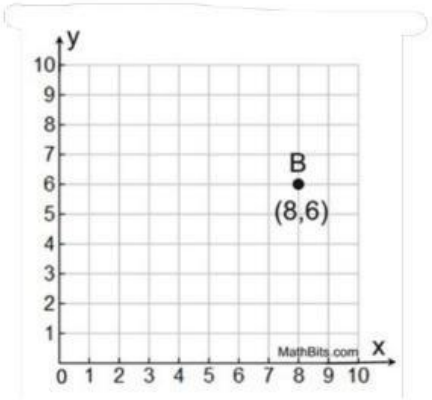
  c) Explain why helicopter A is rising faster than helicopter B.

  d) State the constant of proportionality associated with the rise of each helicopter.

- ✓ Carley ordered 10 bottles of WaZo Colored Hair Spray for $50.60. Write the equation that represents the proportional relationship between *y*, the total cost of the hair spray and *x*, the number of bottles ordered?

LIVEWORKSHEETS

✓ A line passing through unknown point A and plotted point B represents a proportional relationship.
If point B lies at (8,6), which of the ordered pairs shown below, could represent the coordinates of point A?



✓ The number of chaperons on a field trip is proportional to the number of students, as shown in the table.
The value of A ,B and C are as follows :

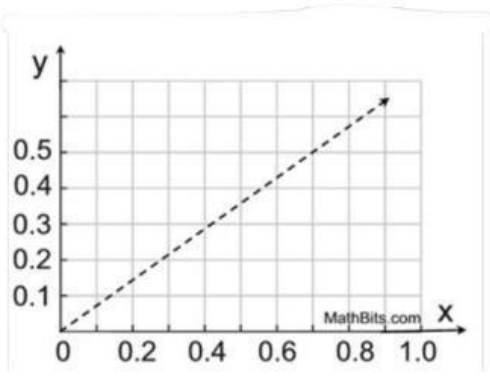
A = _____ B = _____

C = _____

# of Chaperones	3	B	9	12
# of Students	A	16	24	C

✓ The graph shows the relationship between x-values and y-values in a given situation.
Which of the following choices is the constant of proportionality for this graph ?

_____



✓ Which of the following choices represents the constant of proportionality associated with walkers A and B

LIVEWORKSHEETS



✓ The perimeter of a regular pentagon can be represented by the equation $P = 5s$, where P is the perimeter and s is the length of a side. Does this equation represent a proportional relationship? Explain.

✓ During the summer, Martina works on her uncle's dairy farm. One of Mar tina's many chores is to load bales of hay onto a wagon and haul them from the field into the barn. There is a proportional relationship between the number of wagon loads, and the number of bales of hay Martina can haul, y

In 2 wagons loads , Martina can haul 8 bales.

a) Write the equation for the relationship between x and y

✓ Every spring, Brendan plants colorful flowers in his garden. This year, he decides to plant petunias. He buys them at the garden store, bri ngs them back home, and starts planting. There is a proportional rel ationship between the amount of time (in minutes) Brendan has been working in his garden, x, and the numb

LIVEWORKSHEETS

er of petunias he has planted, *y* . After working in his garden for 1 minute , Brendan has planted 3 petunias.

a) Write the equation for the relationship between x and y.

b) From the above equation , How many petunias has Bredan planted after working in his garden for 4 minutes.

c) How long does it take Bredan to plant 18 petunias ?

✓ The Picture and Sound electronics store has hired Samir to work in th e warehouse. He uses a pulley with a hand crank to lift heavy boxes . There is a proportional relationship between the number of times. S amir turns the crank to lift a box,*x*, and the height the box has been lifted (in feet), *y* . He turns the crank 4 times to lift a box 1 foot.

a) Write the equation for the relationship between x and y

b) From the above equation , How many times must he churn the crank to lift a box 3 feet ?

c) How high does Samir lift a box by turning the crank 20 times?

✓ Erin owns and operates Stain-B-Gone Carpet Cleaners. She uses a special non-toxic cleaning solution to clean carpets. There is a proportional r elationship between the amount of cleaning solution (in quarts) Erin uses, *x*, and the area of carpet (in square yards) she cleans with the solution, *y*

Erin uses 7 quarts of cleaning solution to clean 14 square yards of carpet.

a) Write the equation for the relationship between *x* and *y*.

b) How many square yards of carpet does Erin clean with 9 quarts of cleaning solution?

c) For 154 square yards of carpet , How many quarts of cleaning solution will be needed ?

LIVEWORKSHEETS

LIVEWORKSHEETS