

CISD Grade 6 Math Unit 05

Some questions (c) 2012 by CSCOPE.

- 1 This table shows the different sizes of pegboard available at a hardware store.

Pegboard	Length (in feet)	Width (in feet)
Style 1	2	3
Style 2	4	6
Style 3	6	8
Style 4	10	12

Shannon decided to choose the Style 3 pegboard. Which equation can be used to find P , the perimeter of Shannon's pegboard?

- A** $6 \times 8 = P$
- B** $(6 \times 8) \times 2 = P$
- C** $6^2 + 8^2 = P$
- D** $(6 \times 2) + (8 \times 2) = P$
- 2 Karen has a holiday job wrapping gifts at a department store. She cuts the rectangular wrapping paper from a roll. The table below shows how the area, A , of a piece of wrapping paper changes depending on the length, l , of the paper cut from the roll.

Length (l)	Width (w)	Area (A)
3		60
6		120
9		180
12		240

Complete the table to show the width of the wrapping paper. Use the table to write an equation that can be used to find w , the width of the rectangular wrapping paper, when the length of the wrapping paper is 14.

- 3 The table below shows the relationship between quarts and gallons.

Quarts q	Gallons g
5	$1\frac{1}{4}$
6	$1\frac{1}{2}$
8	2
9	$2\frac{1}{4}$

Which of the following equations BEST represents the relationship between quarts, q , and gallons, g ?

A $g = q - 3\frac{1}{4}$

B $g = q - 4\frac{1}{2}$

C $g = q \div 4$

D $g = q \times 4$

- 4 Laura has a 2-liter bottle of juice. Which equation could be used to convert liters, L , to an equivalent amount of milliliters, ml ?

F $ml = L \div 1000$

G $ml = 1000 L$

H $ml = L \div 100$

J $ml = 100 L$

- 5 This table shows the mass of four dogs in kilograms and grams.

Number of Dogs	Kilograms k	Grams g
1	25.8	25,800
2	21.4	21,400
3	9.8	9,800
4	11.7	11,700

If a fifth dog weighs 14.3 kilograms, which equation could be used to find its mass, g , in grams?

- A** $g = 14.3 \cdot 1,000$
- B** $g = 14.3 + 1,000$
- C** $g = 14.3 \div 100$
- D** $g = 14.3 - 1,000$
- 6 This table shows the amount of pumpkin filling, in ounces and pounds, in some pumpkin pies.

Ounces o	Pounds p
24	$1\frac{1}{2}$
28	$1\frac{3}{4}$
40	$2\frac{1}{2}$

If a pie has 36 ounces of pumpkin filling in it, which equation could be used to find the amount of pumpkin, in pounds, p ?

- F** $p = 36 - 23\frac{1}{2}$
- G** $p = 36 + 16$
- H** $p = 36(16)$
- J** $p = 36 \div 16$

7 Which table represents the relationship between cups and pints?

A

Cup(s)	Pint(s)
1	$\frac{1}{2}$
2	1
3	$1\frac{1}{2}$
4	2

B

Cup(s)	Pint(s)
$\frac{1}{2}$	1
1	2
$1\frac{1}{2}$	3
2	4

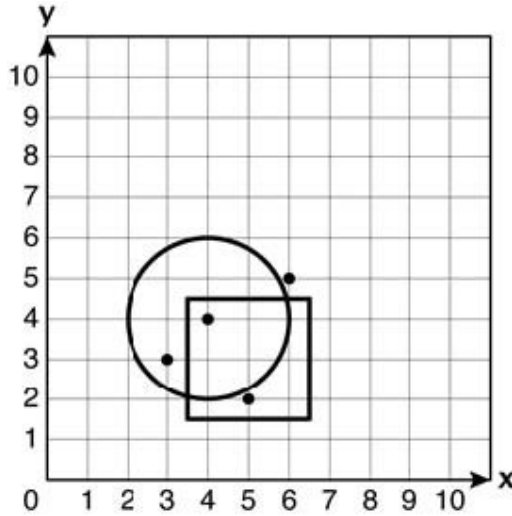
C

Cup(s)	Pint(s)
1	2
2	4
3	6
4	8

D

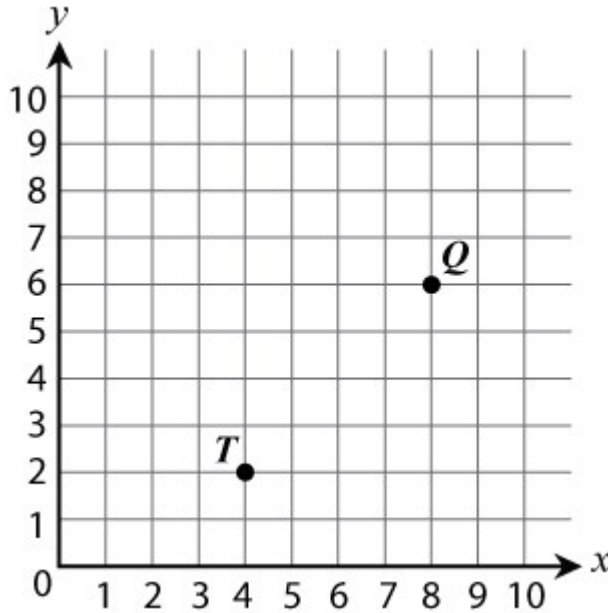
Cup(s)	Pint(s)
2	$\frac{1}{2}$
4	1
6	$1\frac{1}{2}$
8	2

8 Which coordinate pair is inside both the square and the circle?



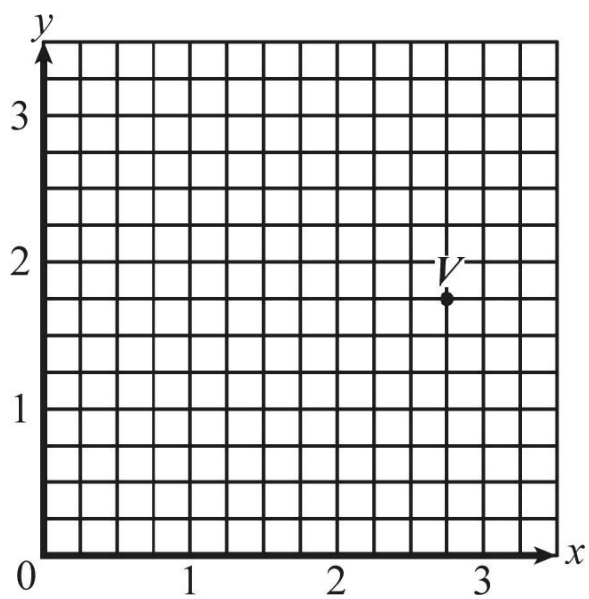
- F (6, 5)
- G (4, 4)
- H (5, 2)
- J (3, 3)

9 What point would represent half-way between points T and Q?



- A (6, 5)
- B (5, 6)
- C (4, 6)
- D (6, 4)

10 Which coordinate pair BEST represents Point V ?



F (1.75, 2.75)

G (2.3, 1.3)

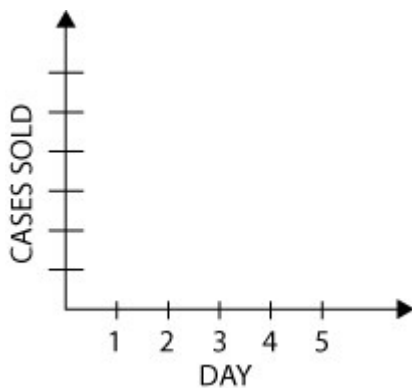
H (2.75, 1.75)

J (1.3, 2.3)

11 Imagine that a market had 300 cases of a popular snack. The first day 6 cases were sold. The second day 14 cases were sold. Each day 8 more cases were sold than the day before.

A. Create a table to show the number of cases sold for the first FIVE days.

B. Graph the information from your table.



C. Is this relationship proportional?
Why or why not?