

Practice Test

U17 &18 – Laws of Arithmetic & Cartesian Coordinates



Question 1 (5 points) – Complete the equations below using order of operations.

a) $38 - 2 \times 16 =$	
b) $4 + 8 \div 2 =$	
c) $(15 - 8) \times (2 + 6) =$	
d) $2 \times 16 + 12 - 16 \div 4 =$	
e) $2^2 + (4 + 1)^2 \times 12 =$	

Note: Do not put spaces or commas in numbers

Question 2 (4 points) – Add an operator (e.g. +, -, *, /) to make the equations below correct.

a) $15 \quad 8 \quad 2 = 11$	c) $14 \quad 2 \quad 3 = 25$
b) $4 \quad 6 \quad 2 = 26$	d) $25 \quad 4 \quad 20 = 105$

Question 3 (4 points) – Use the DISTRIBUTIVE LAW to solve these problems

a)

$$\begin{array}{l}
 12 \quad \times \quad 14 \\
 \downarrow \quad \nearrow \\
 = 10 \times \boxed{} + 2 \times \boxed{} \\
 = \boxed{} + \boxed{} \\
 = \boxed{}
 \end{array}$$

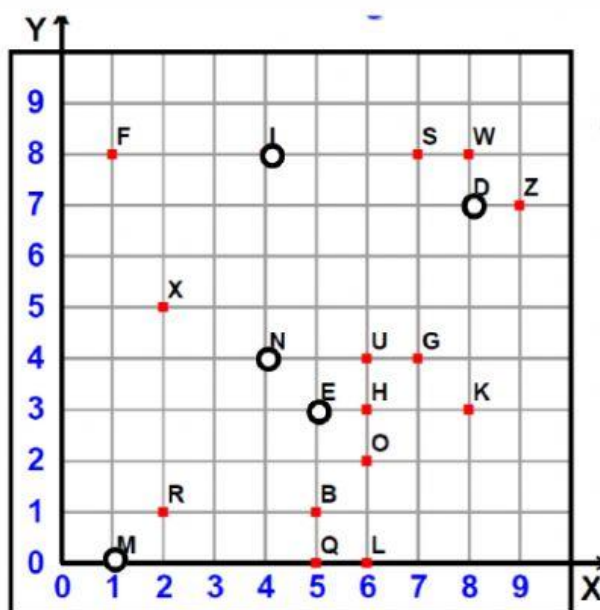
b)

$$\begin{array}{l}
 9 \quad \times \quad 16 \\
 \downarrow \quad \nearrow \\
 = 10 \times \boxed{} - 1 \times \boxed{} \\
 = \boxed{} - \boxed{} \\
 = \boxed{}
 \end{array}$$

Question 4 (4 points) – Circle TRUE or FALSE for each of these equations

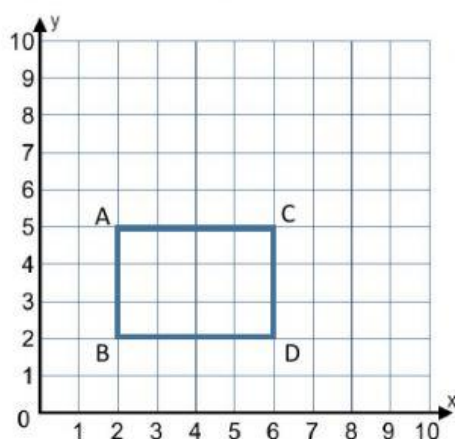
a) $15 \times 28 = 28 \times 15$	TRUE	FALSE
b) $15 \div 30 = 30 \div 15$	TRUE	FALSE
c) $24 - 16 = 16 - 24$	TRUE	FALSE
d) $8 + 240 + 16 + 3 = 4 + 4 + 240 + 16 + 3$	TRUE	FALSE

Question 5 (4 points) – Write the correct Cartesian Coordinates that match each letter on the grid.



W: (,)
 E: (,)
 M: (,)
 Z: (,)
 K: (,)

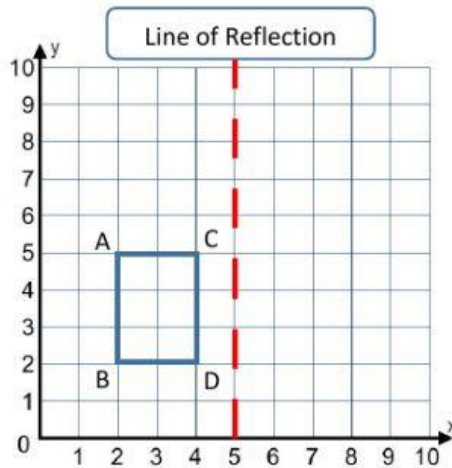
Question 6 (4 points) – Write the new coordinates of the shape if it was translated (2,3).



New Coordinates

A': (,)
 B': (,)
 C': (,)
 D': (,)

Question 7 (4 points) – Write the new coordinates of the shape if it was reflected in the line below:



New Coordinates

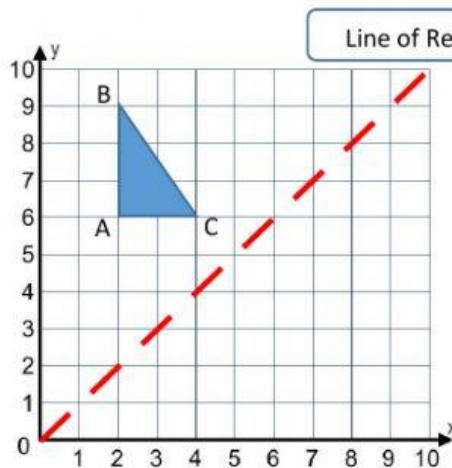
A': (,)

B': (,)

C': (,)

D': (,)

Question 8 (3 points) – Write the new coordinates of the shape if it was reflected in the line below:



New Coordinates

A': (,)

B': (,)

C': (,)