

Name:

Class:

MCAS Practice Test - Pearson 01
(CO Test Nav Questions, Part 1 of 2)

Question 01

Which decimal is equivalent to $\frac{11}{15}$?

- A. $0.\overline{733}$
- B. 0.73
- C. $0.7\bar{3}$
- D. 0.733

Question 02

Which input-output table represents a nonlinear function?

Select **each** nonlinear function.

A.

Input (x)	Output (y)
2	3
3	7
4	11

B.

Input (x)	Output (y)
2	4
4	8
6	12

C.

Input (x)	Output (y)
2	2
4	14
6	34

D.

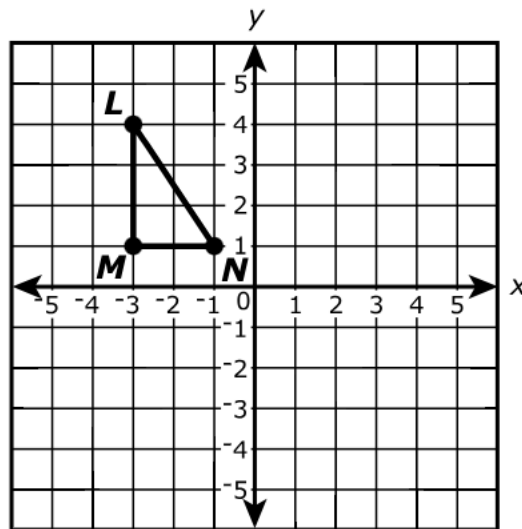
Input (x)	Output (y)
2	5
3	10
4	17

E.

Input (x)	Output (y)
2	2
4	3
6	4

Question 03

Triangle LMN is shown on the coordinate plane.



Triangle $L'M'N'$ is the image of triangle LMN after a reflection.

Which statement is true about the line segments in the two triangles?

- A. \overline{NL} is the same length as $\overline{M'N'}$.
- B. \overline{NL} is the same length as $\overline{N'L'}$.
- C. \overline{LM} is shorter than $\overline{L'M'}$.
- D. \overline{MN} is longer than $\overline{L'M'}$.

Question 04

An ant's mass is 5×10^{-3} grams. A bee's mass is 1×10^{-1} grams.

Based on this information, how many ants equal the mass of one bee?

Enter your answer in the box.

Question 05

Solve the system of equations.

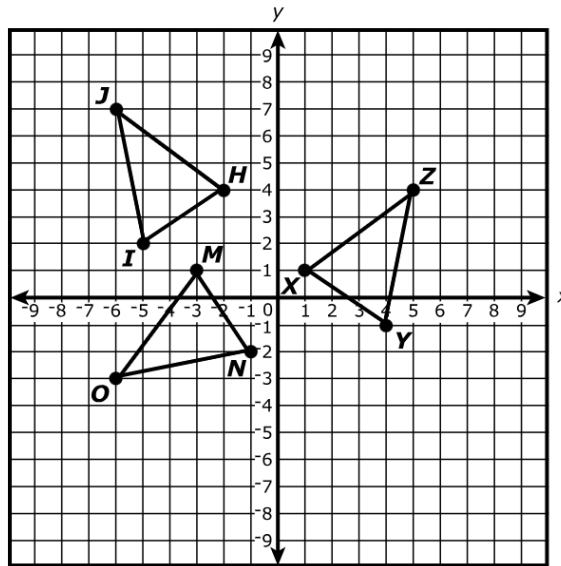
$$4x + 5y = 20$$

$$3x + 10y = 20$$

Enter your answer in the space provided. Enter **only** your answer.

Question 06

Consider $\triangle HIJ$, $\triangle MNO$, and $\triangle XYZ$ on the coordinate plane. All three triangles are congruent.



Part A

Which sequence of transformations can be applied to $\triangle HIJ$ to prove that $\triangle HIJ \cong \triangle MNO$?

- A. a rotation 90° counterclockwise about the origin and then a translation up 3 units and right 1 unit
- B. a rotation 90° clockwise about the origin and then a translation up 3 units and right 1 unit
- C. a reflection across the x -axis and then a translation up 5 units and left 1 unit
- D. a reflection across the x -axis and then a translation right 4 units

Part B

Which sequence of transformations can be applied to $\triangle HIJ$ to prove that $\triangle HIJ \cong \triangle XYZ$?

- A. a rotation 180° about the origin and then a translation down 1 unit and left 1 unit
- B. a rotation 180° about the origin and then a translation up 5 units and left 1 unit
- C. a reflection across the y -axis and then a translation down 3 units and left 1 unit
- D. a reflection across the y -axis and then a translation up 3 units and left 1 unit

Question 07

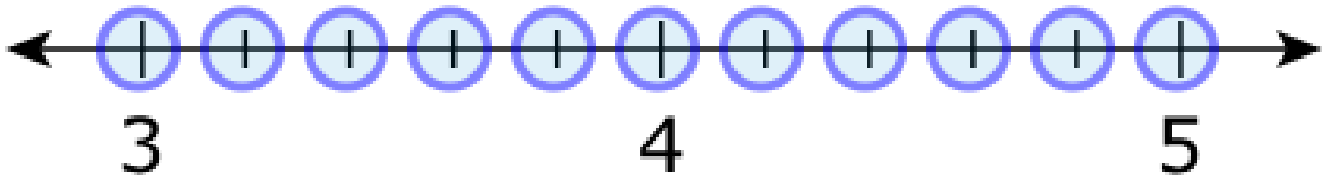
Which expression is equivalent to $4^5 \times 4^{-3}$?

- A. 4^8
- B. 4^2
- C. 4^{-2}
- D. 4^{-8}

Question 08

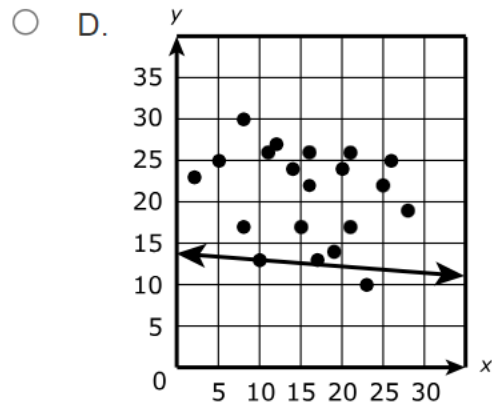
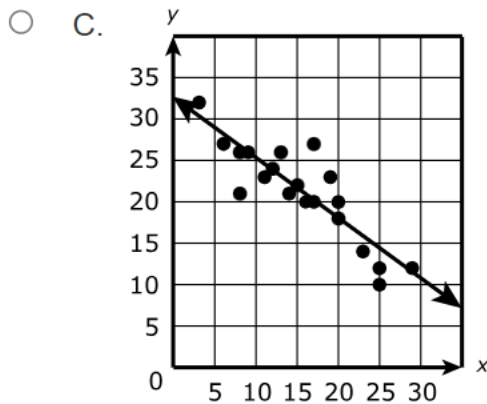
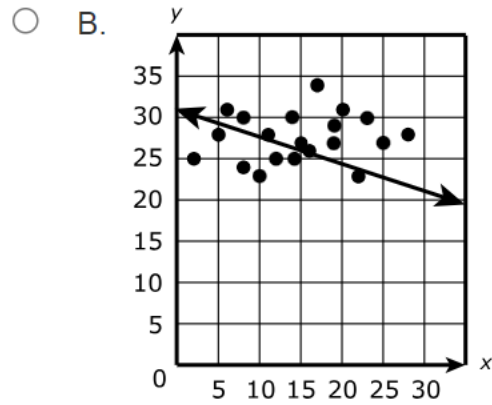
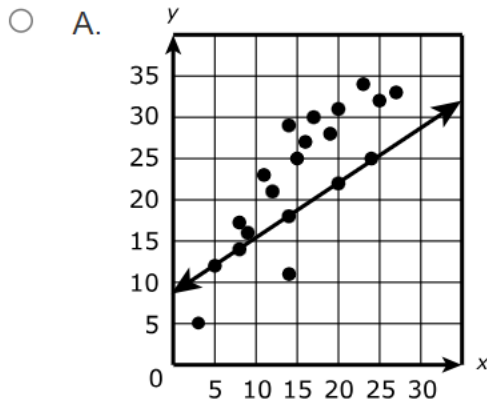
Select a point on the number line that **best** approximates the location of $\sqrt{10}$.

Select **one** place on the number line to plot the point.



Question 09

Which scatter plot illustrates a line of best fit for the data?



Question 10

The $\sqrt{55}$ is between which two values?

- A. 6.5 and 7
- B. 7 and 7.5
- C. 7.5 and 8
- D. 8 and 8.5