

Least Successful Questions:

1. reciprocal_graph (14% of students got this one correct)

According to Boyles' law, $PV = \text{constant}$. If a graph is plotted with the pressure P against the volume V , what would be the shape of graph.

- horizontal straight line
- upward curve
- downward curve
- diagonal straight line

2. Solve_for_R2v (20% of students got this one correct)

Solve for R_2 :

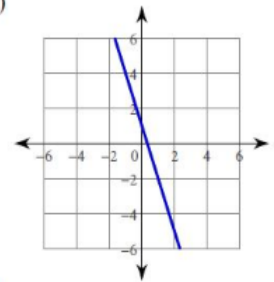
$$v_2 = \frac{vR_2}{R_1 + R_2}$$

- $R_2 = \frac{v_2 R_1}{v - v_2}$
- $R_2 = \frac{v_2 R_1}{2v}$
- $R_2 = \frac{v_2 - R_1}{v}$
- You can't solve for R_2

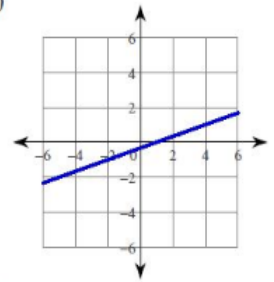
3. equation_from_graphv (33% of students got this one correct)

Determine the graph of $3x - y = -1$.

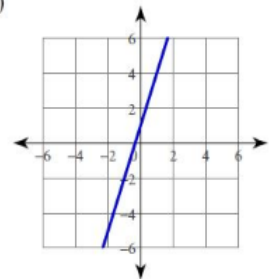
A)



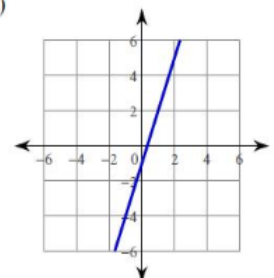
B)



C)



D)



Most Successful Questions:

1. Scientific_Notation_convert_from_greaterv (100% of students got this one correct)

The standard form (regular form) of the value 1.6×10^4 is:

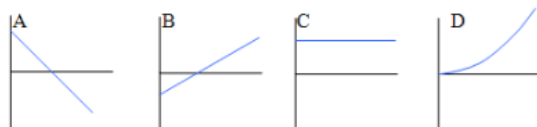
- 0.00016
- 16000
- 160000
- 1600

2. Convert_units_kmhrs_to_ms2v (100% of students got this one correct)

Convert $35(\text{km/hr})/\text{s}$ to m/s^2

- $3.5 \times 10^4 \text{ m/s}^2$
- 9.7 m/s^2
- 583 m/s^2
- 0.97 m/s^2

3. slope_of_line_graph_2nv (100% of students got this one correct)



Which of the graphs above shows a negatively sloped line?

- B
- A
- D
- C

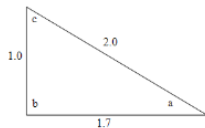
Best for Discriminating Strengths:

1. sig_fig_multv (N D-Value = 0.92)

State the correct number of significant digits which would appear in the answer of the following calculation: $32.46 \times 5.7 = ?$

- 3 s.f.
- 2 s.f.
- 5 s.f.
- 4 s.f.

2. tan_ratio (N D-Value = 0.92)



The tangent of angle c would be:

- $\frac{1.0}{2.0}$
- $\frac{1.7}{1.0}$
- $\frac{1.7}{2.0}$
- $\frac{1.0}{1.7}$

3. Scientific_Notation_convert_to_lessv (N D-Value = 0.85)

Express -0.150 in scientific notation with the correct number of significant figures.

- 1.5×10^1
- -1.5×10^{-1}
- -15×10^{-2}
- -1.50×10^{-1}

Worst for Discriminating Strengths:

1. Solve_for_Fv (N D-Value = 0.00)

Given the following equation solve for F.

$$\frac{5}{9}(F - 32) = C$$

- F = 9C - 32
- F = $\frac{9}{5}C + 32$
- F = $\frac{9}{5}C - 32$
- not enough information to solve for F

2. value_on_graphnv (N D-Value = 0.08)

Which of the graphs above could be described as having a negative initial value?

A

B

C

D

3. number_sig_fig_in_sci_notv (N D-Value = 0.08)

In the value 3.02×10^{-3} the number of significant figures is:

- 4
- 1
- 3
- 2