## EOC-Looking Through the Right Window

## Teacher Notes

How do you get your calculator to show the graph on the page? Look at the question given below. Writing the equation for the problem uses a formula with which the students are familiar. So, why do so many select the wrong answer when this type of question is on a test? Students do not know how to set the window in the graphing calculator to match the graph given in the context of the problem.

In the distance formula $\boldsymbol{d}=r \boldsymbol{r}, r$ represents the rate of change, or slope. Which ray on the graph best represents a slope of 55 mph ?


A $W$
B $X$
C $Y$
D $Z$

Writing the equation for the problem situation. $\qquad$ d=55t $\qquad$

Look at the horizontal axis.
What is the minimum $x$ value shown on the graph? $\qquad$ 0 $\qquad$
What is the maximum $x$ value shown on the graph? $\qquad$ 4
By what are you counting(x scale)? $\qquad$ 1/5 $\qquad$

When looking at the $x$ scale, the student may not know that you are counting by .2 but they can see that 1 is subdivided into 5 parts.

What is the minimum $y$ value shown on the graph? $\qquad$ 0
What is the maximum y value shown on the graph? $\qquad$ 400 $\qquad$
By what are you counting(y scale)? $\qquad$ 50/5 $\qquad$

| Floti Flote F1ots V1日 5 SX <br> $v z=$ <br> V3= <br> $\sqrt{V}=$ <br> Y5= <br> V6= <br> $V_{7}=$ |
| :---: |

```
WIFCIOW
    Xmir=0
    XM.Ex=4
    < =cl=2
    YMir=0
    YMGX=200
    YEl=10
    Mres=1
```

The calculator will change the $x$-scale to the decimal equivalent for $1 / 5$.


Setting a window that matches the given graph, you can see that the correct answer choice is W .

