

Slope-Intercept Form Race # 1

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 2x + 2$

1. Add 3 to the y-intercept. _____
2. Double the slope. _____
3. Decrease the y-intercept by 4. _____
4. Divide the slope by 4. _____
5. Decrease the y-intercept by 1. _____

Slope-Intercept Form Race # 2

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = x$

1. Add 1 to the y-intercept. _____
2. Double the slope. _____
3. Decrease the y-intercept by 2 _____
4. Divide the slope by 4. _____
5. Increase the y-intercept by 5. _____

Slope-Intercept Form Race # 3

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = -\frac{1}{3}x - 3$

1. Add 3 to the y-intercept. _____
2. Triple the slope. _____
3. Increase the y-intercept by 5 _____
4. Multiply the slope by $\frac{1}{2}$ _____
5. Make the slope negative. _____

Slope-Intercept Form Race # 4

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 0.8x + 2$

1. Quadruple the slope. _____

2. Decrease the y-intercept by 20%. _____

3. Multiply the slope by $\frac{1}{2}$ and add to the y-intercept.

4. Increase the y-intercept by 3. _____

5. Multiply the slope and the y-intercept by 0.5.

Slope-Intercept Form Race # 5

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 1.3x - 5.2$

1. Decrease the slope by $\frac{3}{10}$ _____
2. Multiply the y-intercept by $\frac{1}{2}$ _____
3. Double the slope. _____
4. Increase the y-intercept by $\frac{6}{10}$ _____
5. Double the slope and y-intercept. _____

Slope-Intercept Form Race # 1 (KEY)

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 2x + 2$

1. Add 3 to the y-intercept. $y = 2x + 5$
2. Double the slope. $y = 4x + 5$
3. Decrease the y-intercept by 4. $y = 4x + 1$
4. Divide the slope by 4. $y = x + 1$
5. Decrease the y-intercept by 1. $y = x$

Slope-Intercept Form Race # 2 (KEY)

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = x$

1. Add 1 to the y-intercept. $y = x + 1$
2. Double the slope. $y = 2x + 1$
3. Decrease the y-intercept by 2 $y = 2x - 1$
4. Divide the slope by 4. $y = \frac{1}{2}x - 1$
5. Increase the y-intercept by 5. $y = \frac{1}{2}x + 4$

Slope-Intercept Form Race # 3 (KEY)

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = -\frac{1}{3}x - 3$

1. Add 3 to the y-intercept.

$$y = -\frac{1}{3}x$$

2. Triple the slope.

$$y = -x$$

3. Increase the y-intercept by 5

$$y = -x + 5$$

4. Multiply the slope by $\frac{1}{2}$.

$$y = -\frac{1}{2}x + 5$$

5. Take the opposite of the slope.

$$y = \frac{1}{2}x + 5$$

Slope-Intercept Form Race # 4 (KEY)

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 0.8x + 2$

1. Quadruple the slope. $y = 3.2x + 2$
2. Decrease the y-intercept by 20%. $y = 3.2x + 1.6$
3. Multiply the slope by $\frac{1}{2}$ and add to the y-intercept.
 $y = 3.2x + 3.2$
4. Increase the y-intercept by 3. $y = 3.2x + 6.2$
5. Multiply the slope and the y-intercept by 0.5.
 $y = 1.6x + 3.1$

Slope-Intercept Form Race # 5 (KEY)

Essential question: What information does an equation in slope-intercept form give about a line?

START WITH: $y = 1.3x - 5.2$

1. Decrease the slope by $\frac{3}{10}$. $y = x - 5.2$
2. Multiply the y-intercept by $\frac{1}{2}$. $y = x - 2.6$
3. Double the slope. $y = 2x - 2.6$
4. Increase the y-intercept by $\frac{6}{10}$. $y = 2x - 2$
5. Double the slope and y-intercept. $y = 4x - 4$