# Find the slope of the given points ANSWER KEY

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|---|---|
| 1.) m = -3 | 2.) m = 2/3 |
| 3.) m = 4/11 | 4.) m = -5/4 |
| 5.) m = -1 | 6.) m = zero |
| 7.) m = 11/16 | 8.) m = 5/4 |
| 9.) m = undefined | 10.) m = 2/5 |

# Find the intercepts ANSWER KEY

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|---|---|
| 1.) x-int = 4<br>y-int = -8 | 2.) x-int = 9<br>y-int = 9 |
| 3.) x-int = -14<br>y-int = 7 | 4.) x-int = 4<br>y-int = -8 |
| 5.) x-int = -5<br>y-int = 2 | 6.) x-int = -2<br>y-int = 6 |
| 7.) x-int = 15<br>y-int = 3 | 8.) x-int = -4<br>y-int = 2 |
| 9.) x-int = -6<br>y-int = 2 | 10.) x-int = 4<br>y-int = 2 |

# Find the slope from the graph ANSWER KEY

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|---|---|
| 1.)  m = -2/3 | 2.)  m = 2/5 |
| 3.)  m = ½  Look at the scale! | 4.)  m = 1 |
| 5.)  m = -1 | 6.)  m = -1/2 |
| 7.)  m = undefined | 8.)  m = 5 |
| 9.)  m = -1/10 | 10.) m = zero |

# Miscellaneous ANSWER KEY

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|---|---|
| 1.) If two points have an undefined slope then they must have the SAME X VALUE. Y can be any number. | 2.) Never<br>If there is a y-intercept the equation is not direct variation.<br>$$y = 2x + 4$$ |
| 3.) Always<br>The equation $y = 3x$ is always direct variation. The constant of proportionality would be 3. | 4.) If two points have zero slope they must have the same Y VALUE. X can be any number. |
| 5.) (10, -3) | 6.) (-2, -2) |
| 7.) **Similar;** Both equations have a rate of change, the slope. They are also linear functions so both will have a straight line.<br><br>**Different;** The direct variation equation, $y = kx$, always goes through the origin. The slope-intercept equation, $y = mx + b$, can go through the origin, but it can also move up or down the y-axis. | 8.) Sometimes<br>If the slope is a whole number then it is a unit rate. For example a slop of 4 can be written 4/1. If the slope has a denominator other than one it is still a rate, but not a unit rate. |
| 9.) $y = 8x + 2$ | 10.) $3x + 2y = 12$<br><br>OR<br><br>Slope-intercept form; $y = -\frac{3}{2}x + 6$ |