Use the 2 points given in each problem to find slope

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| (1,3)(5,-7) | (-2,4)(4,12) | (-1,-3)(4,-3) |  (2,-5)(2,12) | (-3,-4)(-1,-1) | (2,-3)(3,-2) | (1,2)(3,8) |
|  |  |  |  |  |  |  |

Using the point and y intercept write the equation for each line in slope intercept form

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 8 | 9 | 10 | 11 | 12 | 13 |
| m=2/3 | m=-4 | m=3/5 | m=1/2 | m=-3/4 | m=5 |
| y int.= -4 | y int.= 4 | y int.= -6 | y int.= 10 | y int.= -12 | y int.=6 |
|  |  |  |  |  |  |

Given the point and slope write the equation for each line in point slope form

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 14 | 15 | 16 | 17 | 18 |
| (2,3) | (-3,5) | (-2,-2) | (5,-3) | (-2,-4) |
| m=2 | m=1/2 | m=-3/4 | m=2/3 | m=4/5 |
|  |  |  |  |  |

Given two points find the slope and then write the equation for each line in point slope form

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Question # | 19 | 20 | 21 | 22 | 23 |
| Given Points | (2,-3)(3,-2) | (5,8)(4,-3) | (-2,4)(4,12) | (3,8)(1,2) | (5,7)(6,-9) |
| Slope | m= | m= | m= | m= | m= |
| Equation |  |  |  |  |  |

Take the equations that you just put in point slope form and now put them in slope intercept form

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Question # | 24 | 25 | 26 | 27 | 28 |
| Old Equation |  |  |  |  |  |
| New Equation |  |  |  |  |  |
| Y Intercept |  |  |  |  |  |

29. Mount Olympus is at 500 ft. above sea level. Zeus lets go of a balloon that rises at a rate of 5.8 ft/sec. Write an equation that represents the balloons elevation as a function of time.

30. A burning candle that is 6 inches tall melts at a rate of ½ inch per hour. Write an equation that represents the balloons elevation as a function of time.

31. Logan measured his Mohawk 7 days after he first cut it. Then it was 4 inches tall. Now after 40 days his Mohawk is 9 inches tall. If his hair continues to grow at this rate write an equation for height vs time.