|  |  |
| --- | --- |
| 1 | Which of the following does not represent a way to find slope? |
|  | A | $$m=\frac{Rise}{Run}$$ |
|  | B | $$m=\frac{x\_{2}-x\_{1}}{y\_{2}-y\_{1}}$$ |
|  | C | $$m=\frac{y\_{2}-y\_{1}}{x\_{2}-x\_{1}}$$ |
|  | D | $$m=\frac{∆y}{∆x}$$ |
|  |  |  |
| 2 | What is 0.00502 in scientific notation? |
|  | A | $$5.02×10^{3}$$ |
|  | B | $$50.2×10^{4}$$ |
|  | C | $$5.02×10^{-3}$$ |
|  | D | $$50.2×10^{-4}$$ |
|  |  |  |
| 3 | Which equation has the greatest rate of change? |
|  | A | y= 2x-9 |
|  | B | y= 2x+100 |
|  | C | y= -3x+1000 |
|  | D | y= 9x+ 1 |
|  |  |  |
| 4 | What is the slope of a line passing through the points (-2,-6) and (3,5)?  |
|  | A | $$-\frac{1}{5}$$ |
|  | B | $$-1$$ |
|  | C | $$-5$$ |
|  | D | $$\frac{11}{5}$$ |
|  |  |  |
| 5 | What is half of $2^{8}?$  |
|  | A | 14 |
|  | B | 24 |
|  | C | 17 |
|  | D | 27 |
|  |  |  |
| 6 | The table below gives the length of a spring when different masses are suspended from it. Write an equation for the function.  |
|  |
|  | A | $$y=\frac{3}{5}x+80$$ |
|  | B | $$y= x+60$$ |
|  | C | $$y=30x+50$$ |
|  | D | $$y=\frac{5}{35}x+80$$ |
|  |  |  |
| 7 | Two numbers have a sum of 72. One number is twice the other. Find the smaller number.  |
|  |
|  | A | 24 |
|  | B | 48 |
|  | C | 72 |
|  | D | 36 |
|  |  |  |
| 8 | Which of the following is equivalent to 9-4$ × $93? |
|  | A | $$\frac{1}{9^{12}}$$ |
|  | B | $$9$$ |
|  | C | $$\frac{1}{9}$$ |
|  | D | 97 |
|  |  |  |
| 9 | Which one of the graphs represents a function? |
|  |
|  | A |  | C |  |
|  | B |  | D |  |
|  |  |  |
| 10 | Which set of ordered pairs represents a linear function? |
|  | A | {(-6,-2), (-3,-1),(-6,1),(1,3)} |
|  | B | {(-8,0),(-8,-3),(-8,-6),(-8,-9)} |
|  | C | {(-1,1),(0,2),(-1,4),(2,-7)} |
|  | D | {(-4,1),(-1,1),(2,3),(8,7)} |
|  |  |  |
| 11 | What is the slope of the lines passing through points A and B? |
|  |
|  | A | $$-\frac{1}{3}$$ |
|  | B | $$-3$$ |
|  | C | $$3$$ |
|  | D | $$\frac{1}{3}$$ |
|  |  |  |
| 12 | Select a graph for the situation. You wait for the express bus for 30 minutes, get on and ride the bus non-stop for 3 miles, and then walk another mile to your home. |
|  |
|  | A |  | C |  |
|  | B |  | D |  |
|  |  |  |
| 13 | The equation y=5 is |
|  | A | A vertical line. |
|  | B | Parallel to the y-axis. |
|  | C | Has zero slope. |
|  | D | Has no slope. |
|  |  |  |
| 14 | What are the coordinates$ (x,y)$ at which the graphs $2x+3y=12$ and $2x-y=4$ intersect? |
|  | A | $$(3,2)$$ |
|  | B | $$(2,3)$$ |
|  | C | $$(1,-2)$$ |
|  | D | $$(-3,6)$$ |
|  |  |  |
| 15 | What is the slope of the line 3x+2y=12? |
|  | A | 2 |
|  | B | $$\frac{3}{2}$$ |
|  | C | $$-\frac{3}{2}$$ |
|  | D | 3 |
|  |  |  |
| 16 | Solve for x: $0.7x + 2(x-3)=0.2x + 3$ |
|  | A | 2.5 |
|  | B | 3.5 |
|  | C | 3.6 |
|  | D | 4.5 |
|  |  |  |
| 17 | If a system of equations has no solution, what does it look like?  |
|  | A | Perpendicular lines |
|  | B | Parallel lines  |
|  | C | Same Line |
|  | D | Skew Lines |
|  |  |  |
| 18 | What is the range of the following set of ordered pairs:{(2,9), (3,8), (4,8), (4, 9), (-3, 9)} |
|  |
|  | A | {-3, 2, 3, 4} |
|  | B | {8, 9} |
|  | C | {-3, 2, 3, 4, 4} |
|  | D | {8, 8, 9, 9, 9} |
|  |  |  |
| 19 | A system of two linear equations has been solved graphically. Use the graph to find any solutions. |
|  |
|  | A | infinite solutions |
|  | B | no solutions |
|  | C | (2, -3) |
|  | D | (-3,2) |
|  |  |  |
| 20 | Which of the following statements is true about the relation shown on the graph below? |
|  |
|  | A | It is *not* a function because there are multiple y-values for a given x-value. |
|  | B | It is a function because there exists one x-coordinate for each y-coordinate. |
|  | C | It is a function because there exists one y-coordinate for each x-coordinate. |
|  | D | It is *not* a function because there are multiple x-values for a given y-value. |
|  |  |  |

|  |  |
| --- | --- |
| 21 | Solve the system of equations graphically and check the solution. Show all work. Do not forget to label. *y* + 3 = $\frac{1}{2}$ *x*  *y* – *x* = 0**Solution: \_\_\_\_\_\_\_\_\_\_\_**Check: Check:  |
|  |
| 22  | Solve for x.$\frac{2}{3}$ (6*x* – 12) = 2*x* – 3x=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |
| 23 | Using the table below, write an equation of the line in slope-intercept form.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *x* | 2 | 4 | 6 | 8 | 10 | 12 |
| *y* | 15 | 29 | 43 | 57 | 71 | 85 |

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