Trig Chapter 4 Practice Test 2

Name _____

In 1-4, find the slope, distance, and midpoint between the two given points.

1.   (5, 0) and (8, 6)

   Slope = _____   Distance = _____   Midpoint = _____

2.   (1, 4) and (-1, 8)

   Slope = _____   Distance = _____   Midpoint = _____

3.   (1, -5) and (5, -1)

   Slope = _____   Distance = _____   Midpoint = _____

4.   (2, n) and (4, n + 6)

   Slope = _____   Distance = _____   Midpoint = _____

_____ 5.   Give the equation of the line, in slope intercept form, that goes through the point (8, 4) and has a slope of -1.

_____ 6.   Give the equation of the line, in slope intercept form, that goes through the point (-8, 2) and has a slope of ½ .

_____ 7.   Give the equation of the line, in slope intercept form, that goes through the point (1, 7) and (3, 27)

_____ 8.   Give the equation of the line, in slope intercept form, that goes through the point (2, -1) and (3, -9).

_____ 9.   Give the equation of the line, in slope intercept form, that is parallel to $y = 6x - 1$ and goes through the point (1, 11).

_____ 10.   Give the equation of the line, in slope intercept form, that goes through (2, 8) and is perpendicular to $2x + y = 10$

In 11-14, convert the following into standard form.

_____ 11. $y = 8x - 2$

_____ 12. $y = \dfrac{1}{4}x - 6$

_____ 13. $y = -\dfrac{3}{4}x - \dfrac{1}{3}$

_____ 14. $\dfrac{2}{5}y + \dfrac{2}{3}x = \dfrac{1}{2}$

_____ 15. Give the equation of the line, in **standard form**, that is parallel to $y = 3x + 22$ and passes through the point (4, 5).

_____ 16. Give the equation of the line, in **standard form**, that is parallel to $12x + 2y = 8$ and passes through the point (-1, 2).

_____ 17. Give the equation of the line, **in standard form**, that is perpendicular to $y = -4x - 5$ and passes through the point (-8, 2).

_____ 18. Give the equation of the line, in **standard form**, that is perpendicular to $2x - 10y = 10$ and passes through the point (3, 3).

Calculate the following.

_____ 19. $\displaystyle\sum_{n=0}^{2} n^3$

_____ 20. $\displaystyle\sum_{n=1}^{4} (-2n)^2$

_____ 21. $\displaystyle\sum_{n=0}^{6} 1^n$

_____ 22. $\dfrac{24!}{22!4!}$

_____ 23. $\dfrac{6!}{3!5!}$

_____ 24. $\dfrac{213!}{214!}$