King Abdul Aziz University	Faculty of Sciences
Mathematics Department	Math 110
Workshop 2	Section 1.3
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1) Find the slope of the line through the points $(-3,-6)$ and $(8,-5)$.

[A] 11 [B] $\frac{1}{5}$ [C] $\frac{1}{11}$ [D] $\frac{3}{13}$

2) The slope of the line passes through $(2,6)$ and $(8,-3)$ is

[A] $-\frac{3}{2}$ [B] $\frac{3}{2}$ [C] $-\frac{2}{3}$ [D] $\frac{2}{3}$

3) The slope of the line passes through $(2,2)$ and $(-4,8)$ is

[A] -1 [B] 1 [C] -3 [D] 3

4) The slope of the line $2y=-6$ is

[A] -3 [B] 2 [C] 0 [D] undefined

5) Find the equation of the line with slope -2 and $y-$intercept 3 is .

[A] $y=-2x+3$ [B] $y=-2x-3$ [C] $y=2x+3$ [D] $y=2x-3$

6) Find the equation of the line through the point $(-3,4)$ with slope -2.

[A] $y=-2x-2$ [B] $y=-2x+1$ [C] $y=2x-2$ [D] $y=-2x-10$

7) Find the equation of the line through the point $(1,2)$ with slope 5.

[A] $y=5x-7$ [B] $y=5x+1$ [C] $y=5x+3$ [D] $y=5x-3$

8) The equation of the line passes through the point $(-3,0)$ with slope 5 is

[A] $y=5x-15$ [B] $y=5x-3$ [C] $y=5x+15$ [D] $y=5x+3$

9) The equation of the line with slope $m=-2$ and passes through $(-5,1)$ is

[A] $y=-2x-11$ [B] $y=-2x+6$ [C] $y=-2x+9$ [D] $y=-2x-9$

10) Find the equation of the line through the points $(4,3)$ and $(2,8)$.

[A] $y=-\frac{5}{2}x+1$ [B] $y=\frac{5}{2}x+13$ [C] $y=-\frac{5}{2}x+7$ [D] $y=-\frac{5}{2}x+13$

11) The equation of the line passes through $(4,-3)$ and $(8,-5)$ is

[A] $y=-2x+5$ [B] $y=-2x+11$ [C] $y=-\frac{x}{2}+1$ [D] $y=-\frac{x}{2}-1$

12) The equation of the line passes through $(7,6)$ and $(8,9)$ is

[A] $y=-3x+27$ [B] $y=3x-15$ [C] $y=\frac{x}{3}+\frac{11}{3}$ [D] $y=3x+15$

13) The slope and the $y-$intercept of $2y-3x=-6$ is

[A] $\frac{3}{2}, y=-6$ [B] $\frac{3}{2}, y=-3$ [C] $-\frac{2}{3}, y=-6$ [D] $\frac{2}{3}, y=-3$

14) Find the $y-$intercept of the line $3x-2y-1=0$.

[A] $\frac{1}{3}$ [B] $-\frac{1}{3}$ [C] $-\frac{1}{2}$ [D] $\frac{1}{2}$

15) Find the slope of the perpendicular line to the line $5x-2y-1=0$.

[A] $\frac{2}{5}$ [B] $-\frac{2}{5}$ [C] $\frac{5}{2}$ [D] $-\frac{5}{2}$

16) Find the slope of the parallel line to the line $5x-2y-1=0$.

[A] $\frac{2}{5}$ [B] $-\frac{2}{5}$ [C] $\frac{5}{2}$ [D] $-\frac{5}{2}$

17) The slope of the perpendicular line to the line $3y+2x-6=0$ is

[A] $\frac{2}{3}$ [B] $-\frac{2}{3}$ [C] $-\frac{3}{2}$ [D] $\frac{3}{2}$

18) The slope of the parallel line to the line $3y+2x-6=0$ is

[A] $\frac{2}{3}$ [B] $-\frac{2}{3}$ [C] $-\frac{3}{2}$ [D] $\frac{3}{2}$

19) The equation for the line passes through $(-2,-1)$ and parallel to the line $2x+5y-10=0$ is

[A] $y=\frac{5}{2}x+4$ [B] $y=\frac{2}{5}x-\frac{1}{5}$ [C] $y=-\frac{2}{5}x-\frac{9}{5}$ [D] $y=-\frac{2}{5}x+\frac{9}{5}$

20) The equation for the line passes through $(4,-1)$ and parallel to the line $2x-3y=3$ is

[A] $2x-3y=11$ [B] $2x-3y=-5$ [C] $3x-2y=-5$ [D] $3y-2x=-3$

21) The equation for the line passes through $(1,4)$ and parallel to the line $2x-6y+5=0$ is

[A] $3y=x-13$ [B] $3x+y=-7$ [C] $3x+y=7$ [D] $3y=x+11$

22) The equation for the line passes through $(-3,6)$ and perpendicular to the line $3x-y-8=0$ is

[A] $y=3x+15$ [B] $y=-\frac{1}{3}x+7$ [C] $y=-\frac{1}{3}x-1$ [D] $y=-\frac{1}{3}x+5$

23) The equation for the line passes through $(4,-1)$ and perpendicular to the line $2x-3y=3$ is

[A] $2x-3y=3$ [B] $2x+3y=10$ [C] $3x+2y=-2$ [D] $3x+2y=10$

24) The equation for the line passes through $(1,4)$ and perpendicular to the line $2x-6y+5=0$ is

[A] $3y=x-13$ [B] $3x+y=-7$ [C] $3x+y=7$ [D] $3y=x+11$

25) The slope of the line $2x=-6$ is

[A] -3 [B] 2 [C] 0 [D] undefined

26) The equation of the vertical line passes through $(-3,-6)$ is

[A] $y=-3$ [B] $x=-3$ [C] $y=-6$ [D] $x=-6$

27) The equation of the horizontal line passes through $(-3,-6)$ is

[A] $y=-3$ [B] $x=-3$ [C] $y=-6$ [D] $x=-6$

28) The equation of the line with slope $m=\frac{2}{9}$ and $y-$intercept 4 is

[A] $y=\frac{2}{9}x+4$ [B] $y=\frac{2}{9}x$ [C] $x=\frac{2}{9}y+4$ [D] $x=\frac{2}{9}y$

29) The equation of the line with slope $m=-3$ and passes through the point of the intersection of the two lines $3x-y+1=0$ and $y=2x+3$ is

[A] $y=3x+13$ [B] $y=-3x+1$ [C] $y=-3x+1$ [D] $y=-3x+13$

30) The midpoint of the segment with endpoints $(4,-9)$ &$(-12,-3)$ is

[A] $(4,6)$ [B] $(-4,-6)$ [C] $(8,-3)$ [D] $(-6,-4)$

31) The midpoint of the segment with endpoints $(\sqrt{3},-1)$ &$(3\sqrt{3},4)$ is

[A] $\left(2\sqrt{3},\frac{5}{2}\right)$ [B] $\left(\sqrt{3},\frac{3}{2}\right)$ [C] $\left(2\sqrt{3},-\frac{3}{2}\right)$ [D] $\left(2\sqrt{3},\frac{3}{2}\right)$

32) The midpoint of the segment with endpoints $(-3,-1)$ &$(9,4)$ is

[A] $\left(6,\frac{3}{2}\right)$ [B] $\left(-3,\frac{3}{2}\right)$ [C] $\left(3,\frac{3}{2}\right)$ [D] $(3,-2)$

33) The intersection point of the lines $y=-2$ and $x=3$ is

[A] $(-2,3)$ [B] $(3,-2)$ [C] $(3,0)$ [D] $(0,-2)$

34) The equation for the line passes through $\left(\frac{1}{2},-\frac{2}{3}\right)$ and parallel to the line $4x-8y-1=0$ is

[A] $y=\frac{1}{2}x+\frac{11}{12}$ [B] $y=\frac{1}{2}x-\frac{11}{12}$ [C] $y=-\frac{1}{2}x-\frac{11}{12}$ [D] $y=-2x-\frac{11}{12}$

35) The equation for the line passes through $\left(\frac{1}{2},-\frac{2}{3}\right)$ and perpendicular to the line $4x-8y-1=0$ is

[A] $y=-2x+\frac{1}{3}$ [B] $y=-2x-\frac{1}{3}$ [C] $y=2x+\frac{1}{3}$ [D] $y=-2x-\frac{1}{2}$

36) Find the equation of the line through $(6\sqrt{2},-\sqrt{2})$ with slope $-\frac{1}{2}$.

[A] $y=-\frac{1}{2}x$ [B] $y=-\frac{1}{2}x-3\sqrt{2}$ [C] $y=\frac{1}{2}x+2\sqrt{2}$ [D] $y=-\frac{1}{2}x+2\sqrt{2}$

37) Find the equation of the line through $(6\sqrt{2},-\sqrt{2})$ and parallel to the line with slope $-\frac{1}{2}$.

[A] $y=2x$ [B] $y=2x-13\sqrt{2}$ [C] $y=-2x+13\sqrt{2}$ [D] $y=2x+13\sqrt{2}$

38) The equation of the line segment joining the points $(1,4)$ and $(7,-2)$ is

[A] $y=x+5$ [B] $y=-x-5$ [C] $y=-x+5$ [D] $y=-x-3$

39) Fine the equation for the line passes through the point $\left(\frac{1}{2},-\frac{2}{3}\right)$ and perpendicular to the line segment joining the points $(1,4)$ and $(7,-2)$.

[A] $y=x-\frac{7}{6}$ [B] $y=-x-\frac{7}{6}$ [C] $y=x+\frac{7}{6}$ [D] $y=-x-\frac{1}{2}$

40) Fine the equation for the line passes through the point $\left(\frac{1}{2},-\frac{2}{3}\right)$ and parallel to the line segment joining the points $(1,4)$ and $(7,-2)$.

[A] $y=-x+\frac{7}{6}$ [B] $y=x-\frac{1}{6}$ [C] $y=x+\frac{1}{6}$ [D] $y=-x-\frac{1}{6}$