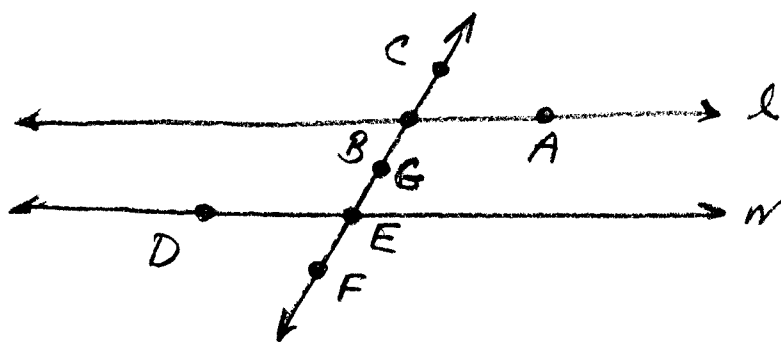


- ① $m\angle ABC = 20^\circ$, $m\angle DEF = ?$, $l \parallel m$



- ② Circle, $r = 4$ in., find exact circumference and area.

- ③ Given $X = \{2, 6, 9, 8, 12, 7, 9, 1, 4, 0\}$
Find: mean, median, mode

ANS) ① $m\angle DEF = 20^\circ$

② $C = 2\pi r$ $A = \pi r^2$
 $= 2\pi 4$ $= \pi(4)^2$
 $= \boxed{8\pi} \text{ in}$ $= \boxed{16\pi} \text{ in}^2$

③ $\bar{2}, \bar{6}, \bar{9}, \bar{8}, \bar{12}, \bar{7}, \bar{9}, \bar{1}, \bar{4}, \bar{0}$
 $0, 1, 2, 4, \underline{\underline{6}}, \underline{\underline{7}}, 8, \underline{\underline{9}}, \underline{\underline{9}}, 12$

MEDIAN = $\boxed{6\frac{1}{2} = 6.5}$

MODE = $\boxed{9}$

MEAN = $\frac{58}{10} = \boxed{5.8}$

1.
DIRECT VARIATION $\Rightarrow$ line through
origin $\therefore b=0$
(0,0)

$$\therefore \boxed{y = mx}$$

Ex) y varies directly as x . y is
8 when x is 2. Find y when
 x is 9.

$$y = mx$$

$$\underset{\substack{\uparrow \\ y \text{ is}}}{8} = m \cdot \underset{\substack{\uparrow \\ \text{when } x \text{ is}}}{2}$$

$$\therefore 4 = m$$

$$\therefore \boxed{y = 4x} \text{ is Equation of Line}$$
$$y = mx + 0$$

Find y when x is 9

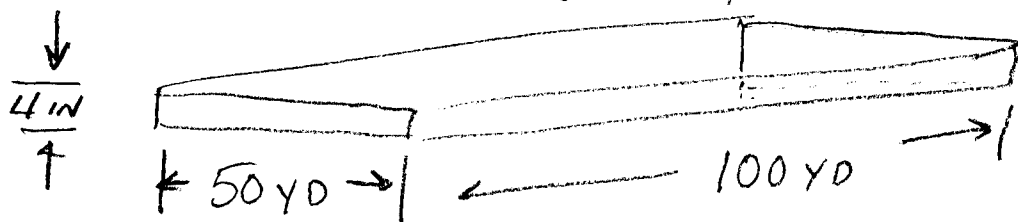
$$y = 4x$$

$$y = 4 \cdot 9$$

$$\boxed{y = 36} \Rightarrow (9, 36) \text{ is point on line}$$

Ex You fill a 50 yd by 100 yd football field to a depth of 4 in. of topsoil. How many cubic yards of topsoil are needed?

Box = rectangular prism



$$V = l \cdot w \cdot h$$

$$\frac{4 \text{ in}}{1} \cdot \frac{1 \text{ ft}}{12 \text{ in}} \cdot \frac{1 \text{ yd}}{3 \text{ ft}} = \frac{4}{36} = \frac{1}{9} \text{ yd}$$

$$\therefore V = 50 \cdot 100 \cdot \frac{1}{9} = \frac{5000}{9} \text{ yd}^3$$

$$\begin{array}{r} 0555. \\ 9 \overline{) 5000.00} \\ \underline{45} \\ 50 \\ \underline{45} \\ 50 \end{array}$$

$$V = 556 \text{ yd}^3$$

~ 25-50 dump
truck loads !!

Practice: DV, P/A/V/C, angles.