

(4, 5, 10, 11, 12, 15, 18, 19, 22, 29, 30)

H.W.

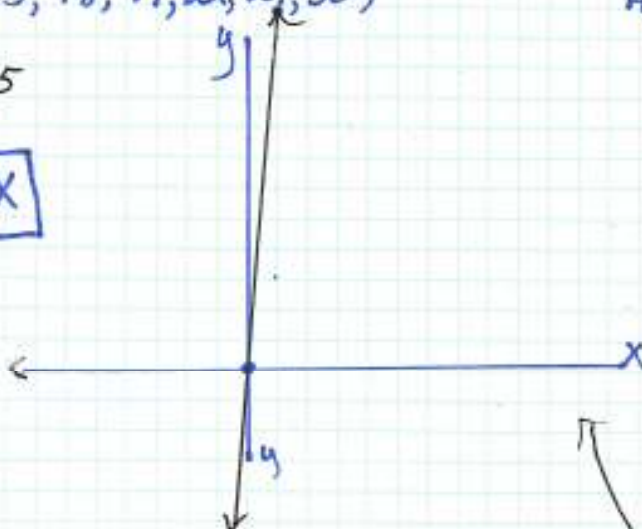
4) $y = 54$ when $x = 4.5$

$y = Kx$

$$\frac{54}{4.5} = \frac{(4.5)K}{4.5}$$

$$y = 12x$$

$K = 12$



5) $\lambda = Kv$

$\lambda = 60$ when $v = 15$

$$\frac{60}{15} = K \frac{(15)}{15}$$

$4 = K$

$\lambda = 4(3)$

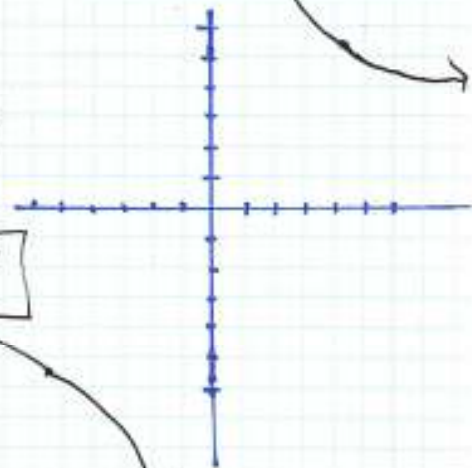
$\lambda = 12 \text{ ft}$

10) $y = \frac{K}{x}$

$4 \cdot 8 = \frac{K}{4} \cdot 4$

$32 = K$

$$y = \frac{32}{x}$$



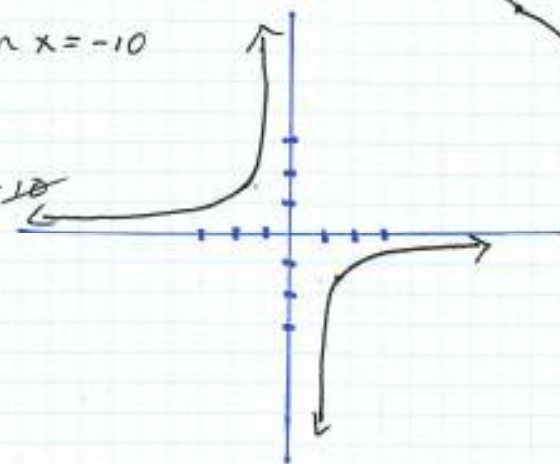
11) $y = \frac{1}{2}$ when $x = -10$

$y = \frac{K}{x}$

$$-10 \cdot \frac{1}{2} = \frac{K}{-10} \cdot -10$$

$-5 = K$

$$y = \frac{-5}{x}$$



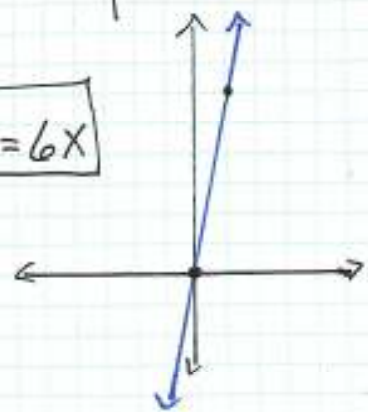
12) $t = \frac{K}{r}$
 $60(4.75) = \frac{K}{60}$
 $285 = K$

$t = \frac{285}{50}$
 $t = 5.7 \text{ h}$

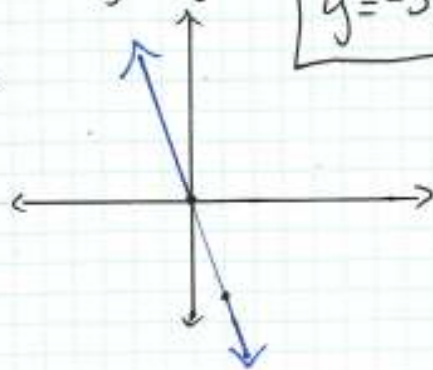
15) **Direct**
 because $K = \frac{y}{x}$
 which = $\frac{5}{4}$

18) $y = Kx$
 $\frac{12}{2} = \frac{K(2)}{2}$
 $6 = K$

$y = 6x$



19) $y = Kx$
 $\frac{-15}{5} = \frac{K(5)}{5}$
 $K = -3$
 $y = -3x$



22) $N = Kap$
 $980 = K(700)(70)$
 $\frac{980}{49,000} = \frac{49,000K}{49,000}$
 $\frac{1}{50} = K$

$N = \frac{1}{50}(1000)(75)$
 $N = 1500$

29) **Neither**
 $K = xy$ is not constant
 and
 $K = \frac{y}{x}$ is not constant

30) **Direct**
 $K = \frac{y}{x}$ is constant
 $K = \frac{3}{2}$