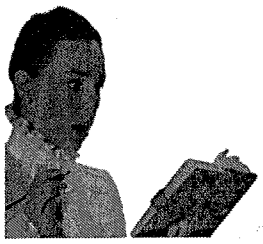
Evaluate the following. Express answers in scientific notation.



10. $9.3\times 10^6 - 6,000,000$

9300000

9300000
− 6000000
3300000

3.3×10^6

11. $(5,400)(6\times10^5)$

$(5.4\times10^3)(6\times10^5)$

$5.4\times6\times10^3\times10^5$

$(32.4)\times10^8$

$(3.24\times10^1)\times10^8$

3.24×10^9

12. $\dfrac{3.2\times10^4}{6.4\times10^7}$

$\dfrac{3.2}{6.4}\times\dfrac{10^4}{10^7}$

$\dfrac{3.2}{64}\left(\dfrac{10}{10}\right)$

$0.5\times10^{4-7}$

$(0.5)\times10^{-3}$

$(5\times10^{-1})\times10^{-3}$

5×10^{-4}

$\dfrac{32}{64}$

$\dfrac{1}{2}=0.5$

Determine the slope AND rate of change of each relation.

13.

Number of Avocados	Cost ($)
2	2.40
4	4.80
6	7.20
8	9.60

RATE OF CHANGE:

$2.40 / 2 AVOCADOS

$1.20/AVOCADO

SLOPE: $1.2 = 1\frac{2}{10} = 1\frac{1}{5} = \frac{6}{5}$

14. n = 17.5h

n is total amount earned (in $)

h is number of hours spent babysitting

RATE OF CHANGE:

$17.50/HR

SLOPE

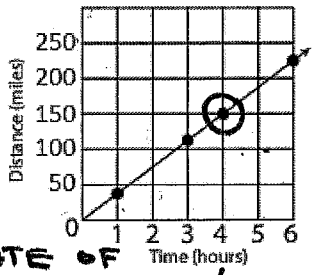
17.5

$17\frac{5}{10}$

$17\frac{1}{2}$

$\frac{35}{2}$

15.



RATE OF CHANGE 150mi/4 HRS

37.5mi/HR

$\frac{150}{4}=\frac{75}{2}$

75 = 25 × 3 = 5 × 5

37.5

2 | 75.0

−6↓

15

−14

10

−10

0

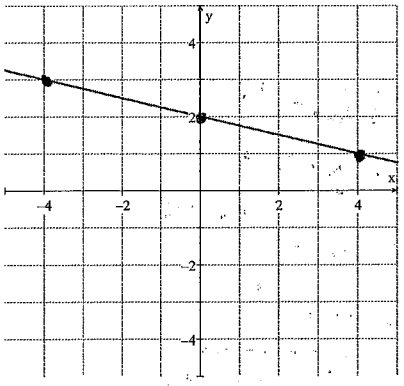
Determine the slope & y-intercept of each relation.

16. $y=2x-3$

SLOPE: 2

Y-INTERCEPT: (0, −3)

17.



SLOPE: $-\frac{1}{4}$

Y-INTERCEPT: (0, 2)

18.

x	y
0	-4
1	-7
2	-10
3	-13

ΔX: +1, +1, +1

ΔY: −3, −3, −3

$m=\frac{\Delta y}{\Delta x}$

SLOPE $=\frac{-3}{1}$

SLOPE = −3

Y-INTERCEPT: (0, −4)