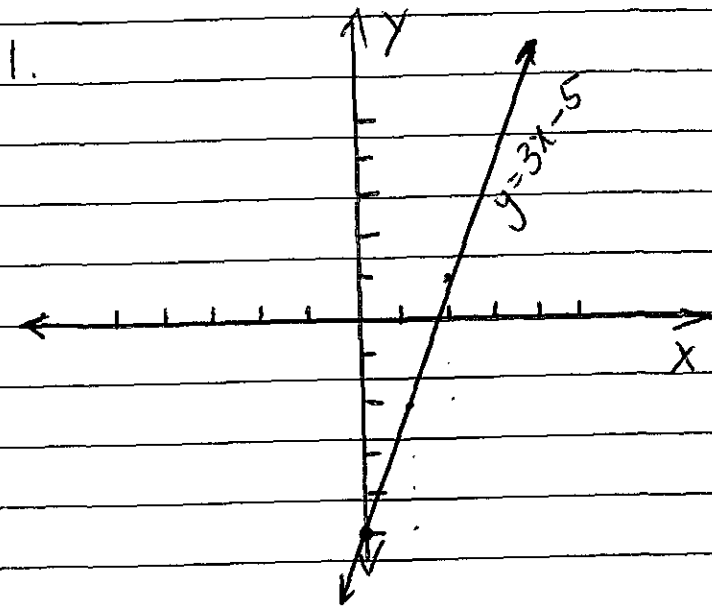


HSC GENERAL MATHS ASSIGNMENT 1



2. $1 : 3\,000\,000$
 $\times 14.9 \quad \times 14.9$
 $14.9\text{cm} : 44\,700\,000\text{cm}$
 $\div 100$
 $447\,000\text{m}$
 $\div 1000$
 447km

3. 225 km/h
 $\times 1000$
 $225\,000\text{m/h}$
 $225\,000\text{m} / 60\text{min}$
 $\div 60 \quad \div 60$
 $3750\text{m} / 1\text{min}$
 $3750\text{m} / 60\text{sec}$
 $\div 60 \quad \div 60$
 62.5m/s

4. $V = \pi r^2 h$
 $= \pi \times 5^2 \times 6$
 $= 471.2\text{m}^3$

5. $x + 8 = 3x - 2$
 $-x \quad -x$
 $8 = 2x - 2$
 $+2 \quad +2$
 $10 = 2x$
 $\frac{10}{2} = \frac{2x}{2}$
 $5 = x$
 $x = 5$

6. $600 \times \frac{104}{100} = 624\text{ml}$

7. D: NoD
a. $23 : 77$
b. $\times 13 : \times 13$
 $299 : 1001$
 299 students drive
c. 1001 ss dont drive
 $6 : 5 = 11$ parts
train: bus.

$1001 \div 11 = 91$

$6 \times 91 = 546$ people
catch the train.

8. 792 km in 11 hours.

a. 792 km / 11 hours

$$\div 11 \quad \div 11$$

$$72 \text{ km/h}$$

$$\times 24$$

$$\times 24$$

1728 km in 24 h

b. 252 km

$$72 \text{ km/h}$$

$$\times 3.5$$

$$\times 3.5$$

$$252 \text{ km} / 3.5 \text{ h}$$

It will take 3.5 hours
(3h 30 mins) to travel
252 km

c. 72 km/h

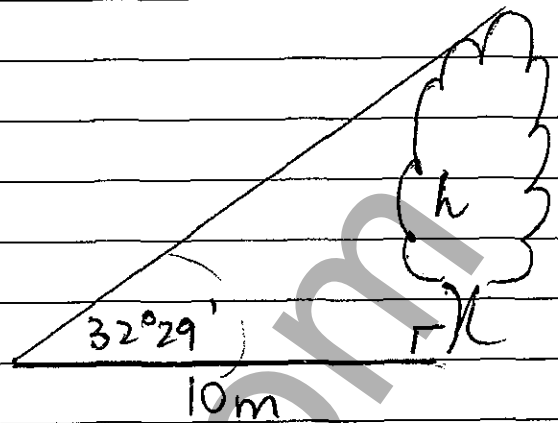
9. This question should read.

Find the dividend per
share if the dividend
yield is 8% and you own
4500 shares with a
current market value of
\$11.40.

$$8/100 \times 11.40 = \$0.91$$

4095
4104

10.



$$\tan \theta = \frac{O}{A}$$

$$\tan 32^\circ 29' = \frac{h}{10}$$

$$\text{height} = 6.4 \text{ m}$$