

MATHEMATICS FORM 1 C.A.T 1 2ND TERM 2012

1 HR

1. Show how the following additions and subtraction are done using a number line (1 mk)

a. $(-5) + (-3)$

b. $(+3) + (-4)$

c. $(-6) - (-3)$

d. $(+7) - (-4)$

2. Evaluate

$4 \frac{15}{32} - 2 \frac{1}{8}$ (2mks)

3. Find the square root of the following using factor method (2mks each)

a. 15625

b. 4225

4. Use square root table to find the square roots of the following and show your working (2mks each)

a. 0.0529

b. 0.001952

5. Express the following recurring decimal as fractions (2mks each)

a. $0.0\overline{67}$

b. $0.\overline{2}1\overline{5}$

c. $3.\overline{25}6\overline{6}$

6. Jane is ten years older than her brother John. Find an expression for:

a. the sum of their ages (1mk)

b. the sum of their ages in 5 years time (2mks)

c. the product of their ages three years ago (2mks)

7. Express as a single fraction

$$x - \frac{1}{2} + x + \frac{2}{4} + \frac{x}{5}$$

8. Simplify by use of common factors

a. $\frac{18ar}{9am} - \frac{18am}{9ar}$ (2mks)

b. $\frac{3bx - 3by + 4ax - 4ay}{x - y}$ (1mk)