

FOUNDATION TIER  
MINI PRACTICE EXAM 1

CALCULATOR ALLOWED  
20 MINUTES ALLOWED



1.

(a) Work out  $\sqrt{22.5}$ . Write down all the numbers on your calculator display.

4.74341649

(1)

(b) Work out  $\frac{2.08^2+31}{2}$  to 1 decimal place.

17.7

(2)

2.

Rice is sold in three different-sized packs.

Pack A contains 500 grams of rice and costs £1.09.

Pack B contains 1 kilogram of rice and costs £2.09.

Pack C contains 3.5 kilograms of rice and costs £6.99.

Which pack provides best value for money?

$$A: 1.09 \div 500 = 0.00218$$

$$B: 2.09 \div 1000 = 0.00209$$

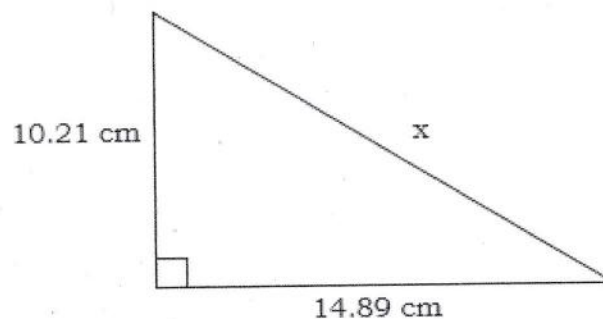
$$C: 6.99 \div 3500 = 0.001997$$

Pack C

(3)

3.

Find  $x$  to 2 decimal places.



$$10.21^2 = 104.2441$$

$$14.89^2 = 221.7121$$

$$+ = 325.9562$$

$$\sqrt{\quad} = 18.0542 \dots = \underline{\underline{18.05 \text{ cm}}}$$

(3)

4.

Erica has a mobile phone contract.

Each month, she pays a bill that depends on how much she uses her mobile phone. She is charged 8p per minute of phone calls she makes, and 3p per text message sent.

(a) In November, Erica made 75 minutes of phone calls and sent 94 text messages. How much, in pounds, was her phone bill in November?

$$75 \times 8 = 600$$

$$94 \times 3 = 282$$

$$282 + 600 = 882p = \underline{\underline{\pounds 8.82}}$$

(3)

(b) In December, Erica sent 108 text messages. Her total bill was £8.04. How many minutes of phone calls did she make in December?

$$108 \times 3 = 324$$

$$804 - 324 = 480$$

$$480 \div 8 = \underline{\underline{60 \text{ minutes}}}$$

(3)

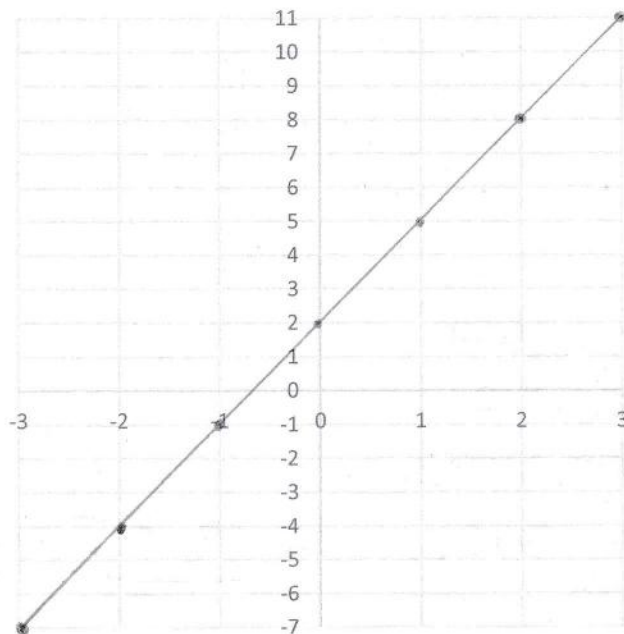
5.

(a) Fill in the table below for values of the graph  $y = 3x + 2$ .

x	-3	-2	-1	0	1	2	3
y	-7	-4	-1	2	5	8	11

(3)

(b) Use the table to plot the graph  $y = 3x + 2$  on the axis below.



(2)