



Year 8 Baseline Test

Non-Calculator

Time: 1 hour

Marks: 50 marks

Name _____

Date _____ Class _____



1. You are given the number 9872.532
- a. Write down the value of the 7. (1 mark)
- _____
- b. Write down the value of the 3. (1 mark)
- _____
2. Insert a number between 5 and 15 inclusive, to make each of the following sentences correct:
- a. _____ is a factor of 30. (1 mark)
- b. _____ is a multiple of 14. (1 mark)
- c. _____ is a square number. (1 mark)
3. Mr and Mrs Patel are taking their three children, aged 9, 6 and 2 years old to a theme park. The entry prices are below.

Adult Ticket: £12.65
Child Ticket: £8.20
Child Under Three Years Old: Free

- a. How much will it cost for the family to go to the theme park? (1 mark)
- _____
- b. They pay with two £20 notes and a £10 note. How much change will they get? (2 marks)
- _____
- _____
4. Evaluate each of the following:
- a. 12.1×3.3 (2 marks)
- _____
- _____
- b. $72 \div 1.6$ (2 marks)
- _____
- _____



5. a. Express 120 as the product of prime factors. (2 marks)

- b. Given that $168 = 2^3 \times 3 \times 7$, find the lowest common multiple of 120 and 168. (2 marks)

6. Simplify each of the expressions below:

- a. $3a + 4b - a + 2b$ (2 marks)

- b. $5 + 6x - 8x - 10$ (2 marks)

7. Kelly spends p hours on her homework on Tuesday night. On Wednesday night, she spends 2 hours on her homework. She does no homework on Monday, Thursday or Friday. Write an expression to represent the total time she spends on her homework during the week.

(1 mark)

8. Evaluate each of the following.

- a. 9^2 (1 mark)

- b. 5^3 (1 mark)

- c. $\sqrt{64}$ (1 mark)



9. a. Write $\frac{5}{16}$ as a decimal. (2 marks)

- b. Write 0.15 as a fraction in its simplest form. (2 marks)

10. a. Callie goes to the shop and buys a pack of 24 jellied beans. She eats $\frac{2}{3}$ of them before she gets home. How many does Callie have left?

(2 marks)

- b. Callie also buys a pack of 20 chocolate biscuits and eats 8 of them before she gets home. What fraction of the pack of biscuits has she eaten? Give your answer in its simplest form.

(2 marks)

11. Evaluate each of the following, giving your answer in its simplest form.

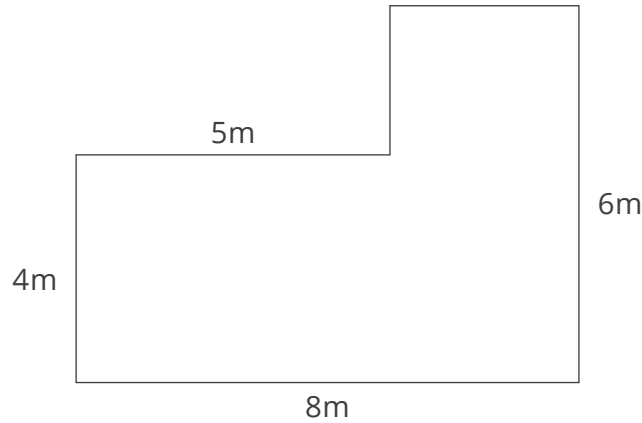
- a. $\frac{5}{6} - \frac{1}{4}$ (2 marks)

- b. $5 \times \frac{4}{7}$ (2 marks)

- c. $\frac{2}{3} \div \frac{4}{9}$ (2 marks)



12. Farmer McGregor wants to put a new fence around the perimeter of his field below. The fence costs £12 per metre. How much will it cost Farmer McGregor in total?



(4 marks)

13. The area of the pitch at Twickenham Stadium in London is 8750m^2 . The pitch at the Principality Stadium at Cardiff is 120m by 79m.

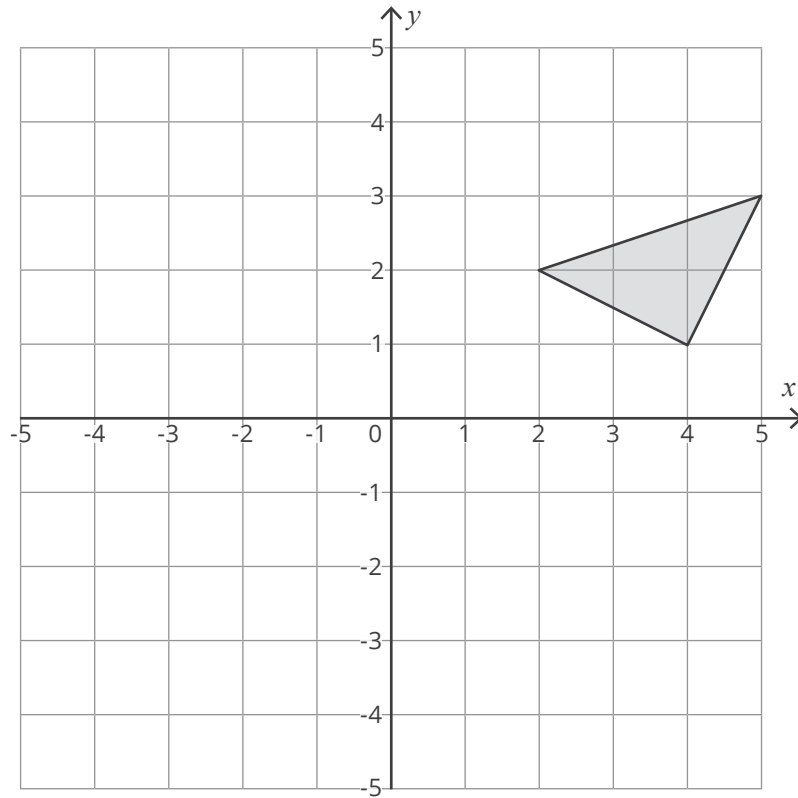
How much bigger is the area of the pitch at the Principality Stadium?

(4 marks)



14. a. Reflect the shape below in the x -axis.

(2 marks)



b. Rotate the shape below 90° clockwise about the origin.

(2 marks)

